DOCUMENT RESUME

ED 371 814 JC 940 423

TITLE Florida Employer Opinion Survey. Annual Report,

August 1991.

INSTITUTION Florida State Dept. of Education, Tallahassee.

PUB DATE Aug 91

NOTE 81p.; Product of the Florida Education and Training

Placement Information Program. For 1992 and 1993

reports, see JC 940 424 and JC 940 425,

respectively.

PUB TYPE Reports - Research/Technical (143) --

Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC04 Plus Postage.

DESCRIPTORS Basic Skills; Community Colleges; *Employer

Attitudes; Job Skills; Job Training; Occupational Surveys; *Outcomes of Education; Questionnaires; Secondary Education; State Surveys; Two Year Colleges; *Vocational Education; *Vocational

Followup

IDENTIFIERS *Education and Training Placement Info Prog FL;

Florida

ABSTRACT

The third in a sories of annual employer opinion reports from the Florida Education and Training Placement Information Program (FETPIP), this 1991 report summarizes the results of three surveys of Florida employers known to have hired former vocational education program participants. One survey solicited employers' general opinions about vocational program completers, while the other surveys focused on employers of radiologic technology program graduates and accounting, clerk typist, and data entry program graduates, respectively. Highlighted survey results include the following: (1) for the third year in a row, employers expressed satisfaction with the occupation-specific skills preparation of employees, and dissatisfaction with basic skill preparation, with levels of both satisfaction and dissatisfaction appearing to increase; (2) employers who responded to the radiologic technology survey indicated higher levels of satisfaction for those hired in this field with respect to their technical and general work preparation; (3) employers who responded to the survey related to the hiring of business program graduates were satisfied with the technical skills of their employees in related fields, but dissatisfied with basic employability skills; (4) overall, employers registered the lowest level of satisfaction with employee preparation; and (5) a large number of employer comments expressed frustration with employees' lack of "work ethic," inability to take direction, inappropriate dress, and lack of pride of workmanship. (KP)



FLORIDA EMPLOYER OPINION SURVEY

ANNUAL REPORT

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J. Pfeiffer

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

FLORIDA EDUCATION AND TRAINING PLACEMENT INFORMATION PROGRAM

TALLAHASSEE, FLORIDA

AUGUST 1991

52h Ot

ERIC

DEST COPY AVAILABLE

FLORIDA EMPLOYER OPINION SURVEY

June 1991

"It is difficult to instill pride in an employee's accomplishments, as well as a desire to excel. Employees need to learn to form quality relationships with clients served by their employer. I guess that these things cannot be taught as skills."

... A Florida Employer

EXECUTIVE SUMMARY

This report deals with employer opinions of the workforce preparation of new employees. It is the third in a series of similar annual reports from the Florida Education and Training Placement Information Program. Each of the reports resulted from an analysis of data that were collected from surveys in Florida. The surveys were conducted to obtain indicators of employers' satisfaction with selected aspects of workforce preparation in Florida, particularly those parts which are vocationally-oriented.

The first report, done in April of 1989, summarized the results of a general opinion survey of Florida employers known to have hired completers from the gamut of public vocational programs available in Florida. Overall, employer responses described in that report showed that employers were more satisfied with vocational education programs than with public education in general. Employers indicated that they were dissatisfied with the basic skill preparation of their employees.

The second report, done in July of 1990, summarized the results of two types of employer opinion surveys. One was a general survey such as that done in the first year. The other was a specific occupational survey. The specific survey focused on employer opinions of the general and occupationally-specific skills of employees who were hired as registered nurses and licensed practical nurses. The general survey for the second year, like that of the first year, showed employers to be generally satisfied with the vocationally-specific preparation of workers. Employers were slightly dissatisfied with general educational preparation, particularly in reading, writing, and mathematical skills. There were some indications, though inconclusive, that employer satisfaction levels had declined over the two years. Employers were satisfied with all elements of preparation of nursing employees, particularly those trained as registered nurses.

This report, the third, reflects the results of a general employer opinion survey like the previous two as well as two occupationally-specific surveys. One specific survey focused on employers who were known to have hired completers of radiologic technology programs in related occupations. The second specific survey focused on employers who hired graduates of accounting operations, clerk typist, and data entry programs in related fields.



i

The results of the general survey again reflected that employers were satisfied with the occupationally-specific skill preparation of employees but dissatisfied with basic skill preparation. The general survey instrument and tallying procedure was refined this year. It is therefore not directly comparable to either of the previous surveys. However, there appears to have been an increase in the level of satisfaction of employers with technical job skills and a decrease in the level of satisfaction with math, reading, and communication skills. Employers who responded to the radiologic technology survey indicated higher levels of satisfaction for those hired in this field with respect to their technical and general work preparation. Employers who responded to the survey related to the hiring of graduates of accounting operations, clerk typist, and data entry programs were satisfied with the technical skills of their employees in related fields, dissatisfied with basic employability skills.

Overall, employers who responded to the general survey registered the lowest level of satisfaction with employee preparation. Respondents to the business occupations survey reflected slightly higher levels of satisfaction. Respondents to the radiologic technology survey reflected the highest levels of satisfaction. These findings reinforce previous implications in this series of reports that as the requirements for employment in an occupation become more specific and precisely defined, the better the education system is able to provide appropriate training (at least as this reflected in the level of job preparation satisfaction expressed by employers).

The report also updates readers on an effort that began last year to define a profile of essential employability skills. The objective of this effort is to develop a feedback mechanism from employers that could be used to improve the workforce relevance of basic public educational offerings.

As with previous efforts, survey respondents, including employers who were queried on-site, provided both solicited and unsolicited comments. Examples of these comments are provided throughout the report. There is a general sense from these responses that employers continue to be concerned that their employees are not as prepared for participation in the workforce as they would like them to be. A large number of comments reflect frustration with employees who lack the rudiments of the "work ethic". These are expressed as the ability of employees to take direction, show up for work on time (or with several comments -- just to show up), dress appropriately, take pride in their work, and work well with others.

Florida's work place and its work force (as well as those of the entire country) are changing rapidly. It continues to be important that the needs, expectations, and responsibilities of workers and students, employers, and educators be redefined as changes occur. This must occur as a broad effort to minimize both personal and societal disruptions.

"Ninety percent of the entry-level applicants that I see are simply not qualified for entry-level positions"

... A Florida Employer



Florida Employer Opinion Survey

June 1991

REPORT OUTLINE

Executive Summary	i
Section I: Introduction	1
Section II: The General Survey A. Process B. Findings C. Recommendations	3 3 7 13
Section III: Specific Survey - Radiologic Technology A. Process B. Findings C. Recommendations	15 15 16 21
Section IV: Specific Survey - Selected Business Occupations A. Process B. Findings C. Recommendations	23 23 24 30
Section V: Selected Analysis	31
Section VI: Employability Profile	39 39 40 40 40 44
Appendix A The General Survey Package	45 55 63 73



SECTION I

INTRODUCTION

"Employees need to know -- need to be taught -- how important they are to the success of any business."

This report summarizes the results of three surveys of Florida employers known to have hired former vocational education program participants during the period July-September 1989. The surveys were conducted to obtain information that would describe the opinions of employers regarding selected facets of the general education and vocational education preparation of workers for employment. The report additionally reviews efforts to explicate an employability skills profile generally applicable to all workers regardless of their occupation.

The efforts described herein are a supplemental operation of the Florida Education and Training Placement Information Program (FETPIP). FETPIP identifies the employers of former students through the Unemployment Insurance Wage Reports managed by the Florida Department of Labor and Employment Security. Over 45,000 employers are annually identified through this process as having hired former students and others being followed-up on by FETPIP. This represents about 12% of all private and public business establishments in Florida. The distribution of establishments by the number of people they employ is such that most firms with employment in excess of 500 people are included while less than 10% of firms with less than 10 employees are included. The proportion of firms in this group distributed by Standard Industrial Classification is very similar to the distribution of all Florida firms. This group of firms is used as the employer universe for developing samples targeted by the employer opinion surveys.

The employer opinion survey processes described herein differ significantly from opinion survey projects typically done by local institutions in Florida and by other states. The principal difference is that FETPIP efforts do not query employers regarding their satisfaction with the competencies of *specific* former students. The more typical approach begins when a local institution contacts individual students, asks them to identify their employer, and asks for permission to contact the employer for information about their performance. The employers of students who give permission are then surveyed. The FETPIP opinion surveys are directed to employers identified in a state-level data base. Because permission has not been obtained from students, individual data are not sought. This means that the FETPIP responses likely reflect employer opinions regarding the general education skills and specific vocational skills and competencies that their newly hired employees brought to the job regardless of where they were trained.



There are five more sections to this report. The next three sections focus on each of the three opinion surveys that were completed this past year. Each of these sections includes a description of the survey process itself, significant findings, and recommendations for subsequent efforts. Section V compares selected results from the three surveys and draws interesting conclusions. The final section discusses the results of on-site discussions with a small sample of employers regarding an employability skills profile. This final section is a new feature of the opinion survey reports. The appendices include copies of survey instruments and other elements of the survey process.

"Mr. ----- is an elderly handicapped man who required sitters in his home. He has moved to a communal living facility and no longer needs household help. I only have knowledge of one LPN we hired and she was excellent."

... A Florida Employer



SECTION II: THE GENERAL SURVEY

"Florida has poured money into the education system and we are still graduating people not qualified for entry level jobs. They can't spell, can't read, can't count."

... A Florida Employer

A. PROCESS

1. BACKGROUND

The 1990-91 employer general opinion survey process was similar to the approach used by the Florida Education and Training Placement Information Program during 1989-90. Its purpose was to continue to gauge employer perceptions regarding the educational and training preparations of their employees. Three changes were made as enhancements to this year's effort from recommendations suggested in last year's report:

1.) the response category of "no opinion" was subdivided into two categories of "average" and "I don't know", 2.) a larger sample was selected, and 3.) a three-part survey contact process was attempted to improve the level of employer response.

2. SAMPLING

The "universe" of employers for this survey was defined as those employers who hired postsecondary vocational completers during the period July 1 through September 30, 1989. The Placement Information Program's 1989 sample employer file contained a listing of over 45,000 public and private firms that had hired former students from a variety of training programs and situations. Of this number, 11,732 firms hired postsecondary completers. These firms were chosen as the "universe" of employers familiar with the job preparation characteristics of completers of vocational education. It was determined that a 10 percent response of this "universe" would be both representative and economically attainable. Based on the 1989-90 effort, a 30 to 40 percent response rate was anticipated.

The "universe" of 11,732 firms was placed in a computer file organized by location, size, and industry type. One of every four records was then selected. As a result, 2,933 firms were identified as comprising the sample of firms to be included in the survey. Additionally, in response to a special request, all additional employers (58 firms) associated with completers from Santa Fe Community College were added to the sample making the total employer survey contact to 2,991 employers. Table 1 compares the size characteristics of the actual "universe" of Florida employers, to the 11,732 in the Placement Information Program "universe" of postsecondary employers, and to the 2,991 in the general opinion survey sample.

Because plans included special business and health surveys to be drawn from the FETPIP "universe" of employers, it was important to prevent contacting the same firm twice for similar information. The records associated with these special surveys were noted and removed from the general survey selection process.



Comparison of Employer Universe to the Opinion Survey Sample by Size of Establishment

Size Class Employees	All Florida Firms 1st QTR 1989	FETPIP Firms July-Sept 1989	Survey By Sample
Large = more than 500	1,076 / <1%	818 / 7%	199 / 7%
Medium = between 10 -500	73,944 / 23%	7,393 / 63%	1,869 / 62%
Small = less than 10	248,627 / 76%	3,521 / 30%	923 / 31%
Total	323,647 / 100%	11,732 / 100%	2,991 / 100%

Table I shows that the postsecondary vocational education completers from the 1988-89 school year that were in the FETPIP follow-up process were more likely to be hired by mid and large size firms than is reflected in the general distribution of firms. The distribution of firms by size in the sample mirrors the distribution of Placement Information Program firms.

Table 2 shows the distribution of firms by major Standard Industrial Classification groups. The survey sample, like the array of FETPIP firms, shows that postsecondary completers are more concentrated in the services (especially health and related services), public administration, are manufacturing industries than the general distribution of firms would suggest. They are less concentrated in the construction, trade, and *FIRE(Finance, Insurance, and Real Estate) industries.

Table 2

Comparison of the Opinion Survey Sample to the Universe

by Type of Establishment

Type of Industry Major Groups	All Florida Firms 1st QTR 1989	FETPIP Firms July-Sept 1989	Sample Survey
Agriculture	10,722 / 3%	286 / 2%	71 / 1%
Mining	211 / <1%	13 / <1%	3 / <1%
Construction	39,486 / 12%	974 / 8%	247 / 8%
Manufacturing	16,183 / 5%	865 / 7%	222 / 7%
Utilities	10.911 / 3%	379 / 3%	98 / 3%
Wholesale Trade	29,501 / 9%	583 / 5%	143 / 5%
Retail Trade	67,436 / 21%	2,678 / 23%	685 / 23%
FIRE *	30,811 / 10%	720 / 6%	185 / 6%
Services	117,705 / 36%	4,754 / 41%	1,216 / 41%
Public Administration	681 / <1%	480 / 4%	121 / 4%
Totals	323,647 / 100%	11,732 / 100%	2,991 / 100%

FIRE: Finance, Insurance, Real Estate



3. THE SURVEY INSTRUMENT

The instrument utilized for the 1990-91 project retained the same questions and survey format that was used during the 1989-90 project year with one enhancement. Several users of the data suggested that the "no opinion" response option used in the past provided unclear results. Therefore this option was eliminated. The response options of "average" and "I don't know" were substituted. All other content was retained. Queries were presented in three categories.

Part 1 - Hiring Needs. In this section, employers were asked to identify general job categories in which they were experiencing difficulties in finding qualified applicants.

Part 2 - General Preparation. In this area, respondents were asked about the

general education and employability preparation of their employees.

Part 3 - Specific Occupational Preparation. This portion contained questions regarding the basic skills, job-associated skills, and interpersonal skills that employees brought to their jobs.

Appendix A contains a copy of the brochure-type questionnaire and accompanying letter.

4. THE SURVEY PROCESS

An initial mailout to 2,991 firms occurred on January 9, 1991. Surveys were remailed to non-responding employers on February 1st and again on February 22nd, 1991. Response data was monitored and recorded by computer program that supports the project.

Additional follow-up was conducted by contacting non-responding firms by phone or by personal visits. Approximately 250 firms were contacted via phone resulting in 84 responses. Thirty employers were visited by project staff. A brief discussion of additional findings from on-site and phone contacts is discussed under the heading "Other Findings" in this section of the report.

5. RESPONSES

"I need to see improvement in personal skills such as appearance; especially proper clothing, verbal communication, no substance abuse, and taking pride in one's work - not just doing it to get it done."

... A Florida Employer

Through the process outlined above, 2,991 firms were contacted. There were 84 surveys returned as undeliverable by the Post Office, 900 responses were useable, and 7 were unuseable responses. This yielded a response rate of 31%. The survey return rate from employers was lower than anticipated. The goal was to obtain responses from 10% of the FETPIP "universe" of postsecondary program completer employers, approximately 8% was obtained. Table 3 reflects response by employer size.

5



Table 3

Comparison of Employer Universe to the Survey Sample and Respondents by Size of Establishment

Size Class Employees	FETPIP Firms July-Sept	Survey Sample	Survey Respondents
Large = more than 500	818 / 7%	199 / 7%	102 / 11%
Medium = between 10 -500	7,393 / 63%	1,869 / 62%	540 / 60%
Small = less than 10	3,521 / 30%	923 / 31%	258 / 29%
Total	11,732 / 100%	2,991 / 100%	900 / 100%

Table 3 shows that the distribution of firms was very similar for each size firm, while larger firms responded at a higher rate than small and medium sized firms. Table 4 displays response by industry type.

Table 4
Comparison of the Opinion Survey to the Responding Employers
by Type of Establishment

by Type of Establishment			
Type of Industry Major Groups	FETPIP Firms July-Sept 1989	Survey Sample	Survey Respondents
Agriculture	286 / 2%	71 / 1%	20 / 4%
Mining	13 / <1%	3 / <1%	1 / 1%
Construction	974 / 8%	247 / 8%	59 / 6%
Manufacturing	865 / 7%	222 / 7%	66 / 7%
Utilities	379 / 3%	98 / 3%	22 / 2%
Wholesale Trade	583 / 5%	143 / 5%	39 / 4%
Retail Trade	2,678 / 23%	685 / 23%	143 / 16%
FIRE *	720 / 6%	185 / 6%	61 / 7%
Services	4,754 / 41%	1,216 / 41%	420 / 46%
Public Administration	480 / 4%	121 / 4%	69 / 7%
Totals	11,732 / 100%	2,991 / 100%	900 / 100%

^{*} FIRE: Finance, Insurance, Real Estate

Ncta: Response rates by industry group were: Agriculture - 28%, Mining - 33%, Construction - 24%, Manufacturing - 30%, Utilities - 22%, Wholesale Trade - 27%, Retail Trade - 21%, FIRE - 33%, Services - 35%, and Public Administration - 57%. The distribution of responses shows that services and public administration were better represented than in the sample. Utilities and retail trade were represented. Response rates were relatively low for utilities and retail trade, particularly high for public administration.



B. FINDINGS

Graphs used in this section use only "satisfied" and "dissatisfied" responses. "I don't know" and "average" responses were not included. These responses are used in a discussion that is provided in Section V and Appendix A of the report.

The graphs are based on a numerical assignment of "2" for each satisfied response, and a "1" for each dissatisfied response. These assignments were tallied for each response and the total was divided by the total number of responses in each query area to obtain a final "score". Responses that reflected "average" or "I don't know" were not included. This approach provides a more concentrated level of either employer satisfaction or dissatisfaction.

1. HIRING NEEDS

"There needs to be more information given out to Jr. High and High School students about Vocational and Technical programs."

... A Florida Emp.oyer

This first inquiry requested that employers identify those job categories in which they were experiencing difficulty in finding qualified applicants. Job categories were selected that were consistent with aggregated job classifications from the Federal/State Occupational Employment Statistics Classification System.

There were nine job categories and one response area available for employers having "no difficulty". Employers could identify as many areas of difficulty as was appropriate. Figure 1 shows Florida employers' response to this question area.

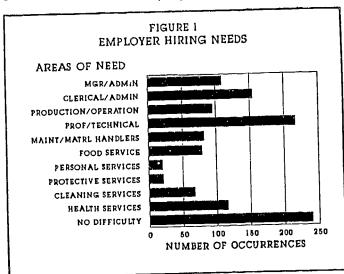


FIGURE 1 COMMENTS: Employers chose the response "No difficulty" most frequently. Professional/Technical and Clerical/Administrative areas were most often cited as needing additional qualified applicants. Within the clerical/administrative area: secretaries, clerks, and receptionists were most frequently mentioned. Within the professional/technical area a multitude of business-specific occupations were mentioned.



2. PUBLIC EDUCATION SYSTEMS

"Although a function of Public Education, graduates should be able to spell the terms and specific words that apply to their particular field of vocational study."

... A Florida Employer

Employers were asked to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and employee work habits of their employees. Figure 2 is a graphic presentation of those four areas and their calculated levels of satisfaction from the general opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

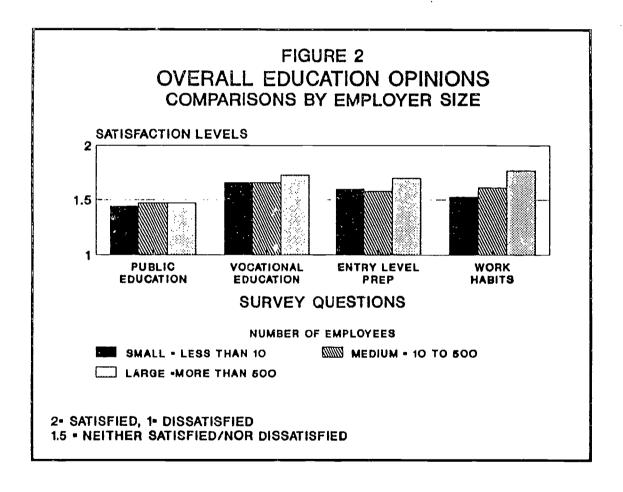


FIGURE 2 COMMENTS: Responses indicated that employers were generally satisfied with vocational education, entry-level preparation, and employee work habits. They were less than satisfied with public education. These responses are consistent with findings in the following sections. They are also consistent with findings from previous years.



3. WORKFORCE PREPARATION

"1) Learn to read and write, 2) Understand <u>basic</u> math, 3) Understand what business is: profitability and customer relations. In my opinion people in Fiorida rate a 5 (Very Dissatisfied) in this area."

... A Florida Employer

Questions about work force preparation were separated into three general areas: basic skills, job-related or associated skills, and communicative or interpersonal skills. Each of these areas included a series of questions that helped to define specific components. These three general areas with their specific internal components are displayed graphically in Figures 3, 4, and 5. Each graph reflects the respective levels of employer satisfaction for selected ranges of firms based on their total number of employees. Small firms included those firms with ten or less employees. Medium-sized firms employed at least ten but less than five hundred people. Large firms employed more than five hundred people.

a. Basic Skills

The overall satisfaction level for basic skills preparation was 1.38, or dissatisfied. Figure 3 looks at five categories of Lasic skills and reflects employer responses by firm size.

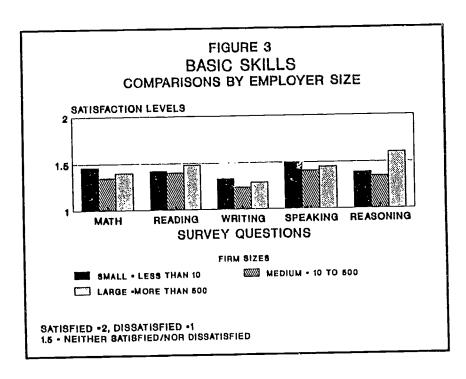


FIGURE 3 COMMENTS: Overall, employers were dissatisfied in all skill areas in the following order: writing, reading, math, reasoning, and speaking. Only in one area of basic skills did employers reflect a slight level of satisfaction, that being reasoning as rated by large employers.



b. Job-Related or Associated Skills

"Actual technical skills are satisfactory, while primary skills need more work."
... A Florida Employer

The overall score for job-related or associated skills was 1.70 or satisfied. Figure 4 shows responses for five specific areas associated with job-related skills for different size firms.

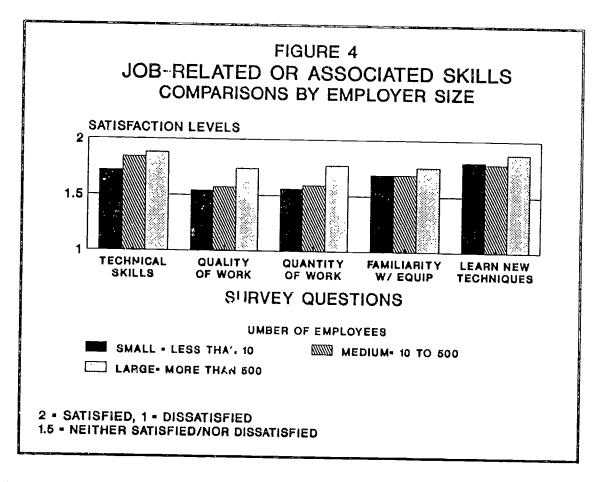


FIGURE 4 COMMENTS: All elements in this inquiry area showed comparatively higher levels of employer satisfaction than other areas of inquiry. Rating particularly high were employees' technical job skills and their ability to learn new techniques. Large employers were more satisfied with each skill competency than were medium and small employers.



c. Commucicative or Interpersonal Skills

"Employees need to be people oriented. They need the ability to communicate with the public."

... A Florida Employer

The overall score for this area was 1.70 indicating satisfaction with these skills. Figure 5 examines responses in these skill areas by employer size.

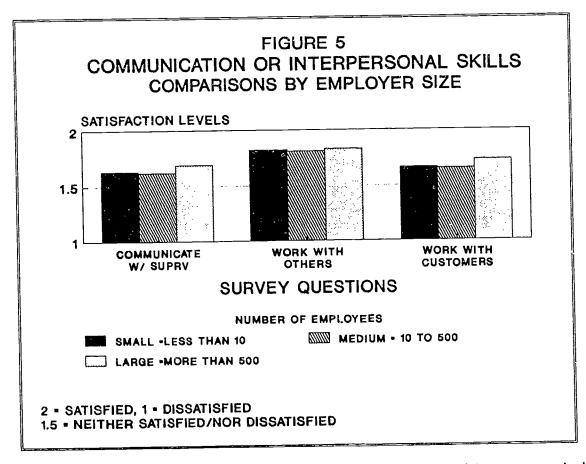


FIGURE 5 COMMENTS: The overall area of communication and interpersonal skills scored the highest level of employer satisfaction. Employers, regardless of size, rated their employee's ability to work with their fellow workers highest.



4. OTHER FINDINGS

"Need to stress cooperation, positive attitudes and the importance of being a "willing worker." This costs more employees their jobs than anything else."

... A Florida Employer

a. Follow-up Activities

Three forms of survey follow-up activities were conducted this year: remails, phone contact, and on-site visits. The following narrative summarizes the findings and insights gained through the follow-up activities.

1. Survey Remails

An initial mailout to 2,991 employers was sent on January 9, 1991. Two survey remails (February 1st and February 22nd) to non-respondents were mailed approximately three weeks after each initial mailout. Each mailout produced nearly identical returns. The initial survey mailout produced a slightly higher response rate of twelve percent. The remails yielded approximately a 10% response rate.

2. Employer Visits

Twenty-two employers were visited to obtain a completed general employer opinion survey and to collect additional bits of information. Efforts were made to visit those employers reflecting either a large number of vocational employees or a high percentage of vocational employees in comparison to the total number employed by that firm. Visits were concentrated in three primary geographical locations - the Duval, Orange, and the Hillsborough - Pinellas county areas. Employers that were contacted varied in size and represented a wide range of industry types. Primary occupations associated with these contacts were health professionals, clerical operations, accountants and bookkeepers, bank tellers, and commercial vehicle drivers.

All firms that were visited advertised for vacant positions in local area newspapers. The larger firms, particularly health employers, utilized national professional magazines along with advertisements in many of the larger city newspapers throughout Florida for recruitment. Most of those that were visited indicated they had no problem locating applicants, particularly at the entry level. However, each expressed concern regarding what they perceived was a decline in the quality of applicants, particularly with respect to basic skills. Like the unsolicited comments quoted throughout this report, concern was continually expressed regarding the lack of positive attitudes, honesty, commitment, desire to succeed, and pride evident in entry-level applicants.

Several large employers have established job-specific and remedial education and training for their employees in response. Smaller employers have found themselves spending an increasing amount of time coaching and instructing employees. Most stated that it typically took up to six months to facilitate an adjustment of employees from the school to the work environment. Several indicated that this was an anomaly since traits



of a successful student should be similar to those of good employees. All desired to participate in school/employer partnerships designed to facilitate the transition. Several were already participating in local programs. Further discussions regarding employer visits are provided in Section VI.

3. Employer Phone Contacts

Slightly more than two hundred fifty follow-up telephone calls were made with the assistance of four FETPIP staff members over a two week period. Contacts concentrated on the local area of Leon, Gadsden, Wakulla counties along with those non-respondents from Hillsborough county. The employers were called after failing to respond to the mail follow-up. This resulted in an additional 84 responses. Three major difficulties were encountered: 1.) finding an appropriate and willing person to respond to the survey, 2.) having the immediate time to complete the survey and, 3.) associating the survey request with vocational program completers within their employ. The first two in combination resulted in the majority of employers requesting that the Project remail them another survey. This produced a limited number of additional responses. The third oft-times resulted in the response "I don't know". Even though they felt unable to make the association with vocational educational training, the majority had negative feelings about public education and basic skill preparation. Phone responses were consistent with mail and on-site responses described within this report.

C. RECOMMENDATIONS

Two issues provide the direction for the general survey effort next year. First, three years of data collection have generally produced the same results; general employer satisfaction towards vocational preparation areas and dissatisfaction with the basic skill preparation of entry level employees. Secondly, general survey response has continually declined despite efforts to generate additional employer returns while specific survey returns, with their occupationally-oriented approach, are considerably higher with more useable data.

It is recommended that the general survey be diversified into two directions focusing on the findings of prior survey years: 1.) continue the collection of the general employer perceptions towards entry-level employee preparation on a three-year collection cycle rather than on its current annual basis, and 2.) focus efforts through employer contact to evaluate occupationally-specific levels of basic skill proficiencies desired by employers.

"Vocational/technical school graduates are confident and knowledgeable."

... A Florida Employer



SECTION III: SPECIFIC SURVEY RADIOLOGIC TECHNOLOGY

"The technicians we have hired from vocational are very well prepared."

... A Florida Employer

A. PROCESS

1. BACKGROUND

Representatives of the Divisions of Community Colleges, the Division of Vocational, Adult and Community Education, the Postsecondary Education Planning Commission, the Florida Chamber of Commerce, and the Florida Council on Vocational Education were consulted along with the Florida Education and Training Placement Information Program staff. As a result two specific program areas were chosen as the focus for this year's specific survey process. These included: 1.) the health area of Radiology, specifically Radiologic Technology, and 2.) the business area of clerical operations specifically the programs of Accounting Operations, Clerk Typist, and Data Entry Operations. This section deals with the radiologic technology survey, the next with the business program surveys.

2. SAMPLE SELECTION

Of the 11,732 firms having hired a postsecondary vocational completer(s), sixty firms were determined to have hired training-related participants from either the Radiologic Technology, RTE Technology, or Basic X-ray Operator program in training-related jobs. If one accepts the notion that 11,732 is the FETPIP "universe" then these sixty firms represent the universe pertaining to radiologic technology. These firms included most of Florida's large health care corporations as well as many clinics and doctor's offices.

3. THE SURVEY INSTRUMENT

The Health Survey instrument was separated into three parts:

Part 1. Questions were included to identify health occupations for which employers were having difficulties finding qualified applicants.

Part 2. Questions in this area related to the general survey regarding overall employer satisfaction with public education, vocational education, entry-level preparation, and employee work habits.

Part 3. Questions from this area were chosen from the intended outcomes from radiologic programs stated in the <u>Vocational Course Code Standards Manual</u>. In essence, they represent the competency areas associated with overall preparation in radiology related occupations.



A copy of the questionnaire and accompanying letter is provided in Appendix B. The package consisted of a survey instrument, an introductory letter from the Office of Radiation Control, and a postage paid business reply envelope.

4. THE SURVEY PROCESS

The initial survey mailout to sixty employers occurred on January 15, 1991. This was followed by two remails to survey non-respondents on February 4th and again on February 20th, 1991.

5. RESPONSES

A total of fifty-five responses were received from employers. This represented an overall response rate of ninety-two percent. It is felt that this high level of response by employers was due to their ability to clearly associate the survey instrument to specific employment. Employers could clearly identify and evaluate their satisfaction with the radiographers or radiology technicians within their employ.

B. FINDINGS

Graphs used in this section use only "satisfied" and "dissatisfied" responses. "I don't know" and "average" responses were not included. These responses are used in a discussion that is provided in Section V and Appendix B of the report.

The graphs are based on a numerical assignment of "2" for each satisfied response, and a "1" for each dissatisfied response. These assignments were tallied for each response and the total was divided by the total number of responses in each query area to obtain a final "score". Responses that reflected "average" or "I don't know" were not included. This approach provides a more concentrated level of either employer satisfaction or dissatisfaction.

"They have excellent assessment skills and excellent documentation skills. Their training needs more emphasis on their role as leaders and teachers!"

... A Florida Employer



1. HIRING NEEDS

This first inquiry area requested that employers identify those health occupations in which they were experiencing difficulties in finding qualified applicants. Occupations were selected from those health occupation program areas presented in the <u>Vocational Education Program Course Standards Manual</u> and are in accord with the Occupational Employment Statistics Program taxonomy. There were eighteen occupations listed and an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as was appropriate. Figure 6 shows the Florida employer's response to this question area for those ten occupations identified as most needed.

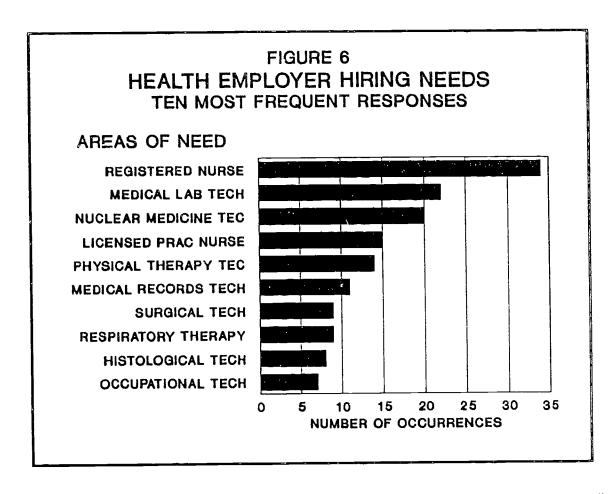


FIGURE 6 COMMENTS: Registered nurse was the most often cited occupation needing ad agraal qualified applicants. This is consistent with previous survey results and with known national trends. Medical laboratory technician, nuclear medicine technician, licensed practical nurse, and physical therapy technician followed as needing additional qualified applicants.



2. PUBLIC EDUCATION SYSTEMS

Employers were asked to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and employee work habits as in the General Survey description provided in Section II. Figure 7 is a graphical presentation of these four inquiries and their calculated levels of satisfaction from the health opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

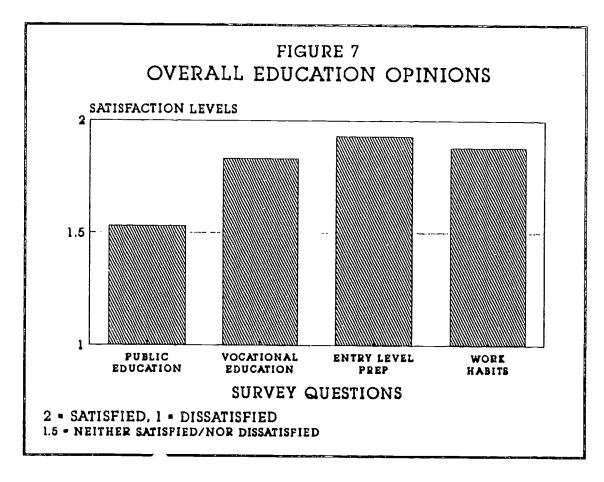


FIGURE 7 COMMENTS: Responses indicated that employers were generally satisfied with vocational education, entry-level preparation, and employee work habits. They were less satisfied with public education, but unlike other results discussed herein, they were not dissatisfied. Responses are generally consistent with other findings in the following section and with all prior year survey efforts. Note the particularly high level of satisfaction with respect to the entry level preparation of radiology program completers.

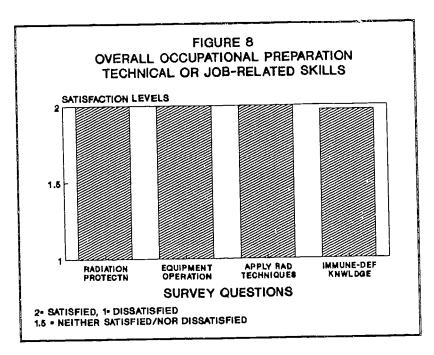


3. OVERALL OCCUPATIONAL PREPARATION

Questions about overall occupational preparation for radiologic jobs were separated into two general areas: job-related or technical skills, and interpretive or evaluation skills. Each of these areas included a series of questions that helped to define specific components. These two areas with their specific internal components are displayed graphically in Figures 8, 9, and 10. A key is provided that defines the abbreviated survey question headings for each of the graphs represented.

a. Job-Related or Technical Skills

The following two graphs depict those skill competencies associated with the general area of job-related or technical job skills.



KEY for Figures 8, 9, and 10:

RADIATION PROTECTIN = apply the principles of radiation protection for the patient, self, and others. EQUIP OPERATION = demonstrate proper operation of radiologic equipment and accessories. APPLY RAD TECHNIQUES = apply knowledge of anatomy, physiology, positioning, and radiographic techniques to accurately demonstrate anatomical structures on a radiographic or other imaging receptor. IMMUNE-DEF KNWLDGE = demonstrate knowledge of immune-deficiency diseases, including AIDS. EMPLOYABILITY SKILLS = demonstrate employability skills.

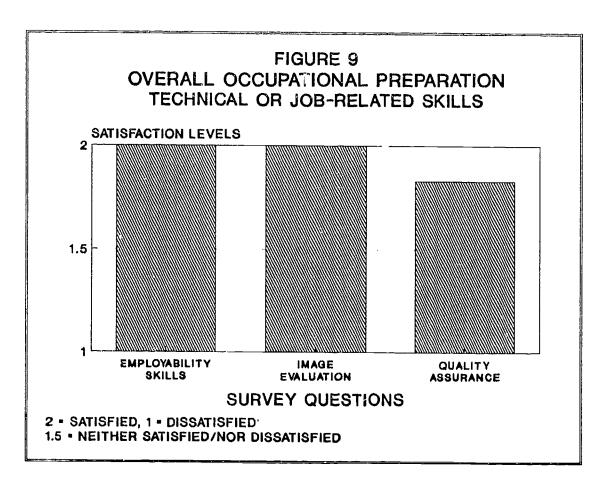
IMAGE EVALUATION = evaluate radiographic images for appropriate positioning and image quality. QUALITY ASSURANCE = perform quality assurance procedures.

PROVIDE CARE COMFORT = anticipate and provide patient care and comfort.

EXERCISE DISCRETION = exercise independent judgement and discretion in the technical performance of medical imaging procedures.

EMERGENCY PROCEDURES = recognize emergency patient conditions and initiate life saving first aid and basic life support procedures.





FIGURES 8 & 9 COMMENTS: Note the high levels of satisfaction with the three competencies of radiation protection, operation of equipment, and the application of radiographic techniques. No employers reflected any dissatisfied responses to any of these areas. The areas of employability skills and image evaluation also did not receive any dissatisfied responses from employers.



b. Interpretive or Evaluation Skills

"Better understanding of the legal issues in health care that are of importance to them in providing care and record keeping."

... A Florida Employer

The following graph depicts those job-related skills that require critical decision-making skills relating to patient service.

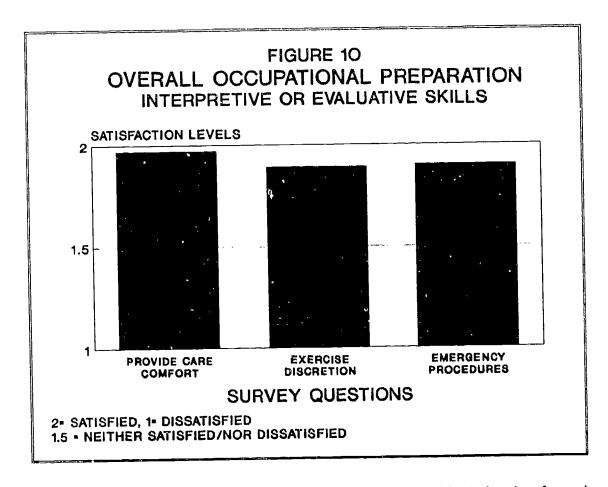


FIGURE 10 COMMENTS: All queries within this area scored high levels of employer satisfaction. The area of anticipating and providing patient care and comfort reflected the highest level of employer satisfaction.

C. RECOMMENDATIONS

This is the second year that targeted health occupations were surveyed. Some of these were in both survey samples. There is a continuing concern as to overburdening any group of potential respondents. Therefore, it is recommended that health occupations not be a feature of next year's effort.



SECTION IV: SPECIFIC SURVEY SELECTED BUSINESS OCCUPATIONS

"Employees need a better understanding of the business world, competition is mounting and business needs good people, not goof offs."

... A Florida Employer

A. PROCESS

1. BACKGROUND

This section deals with surveys directed at employers of students who completed accounting operations, clerk typist, or data entry programs and obtained related jobs.

2. SURVEY SAMPLE

Of the 11,732 firms having hired a postsecondary vocational completer(s), 149 firms were deterrained to have hired participants from either the Accounting Operations, Clerk Typist, or Data Entry Operations program in training-related jobs. These training-related employment occurrences generated 149 unique survey employers. Table 5 reflects the number of unique employers associated with each specific program area.

Table 5

VOCATIONAL PROGRAM	UNIQUE EMPLOYERS	
ACCOUNTING OPERATIONS CLERK TYPIST AND	48 50	
	149	
DATA ENTRY OPERATIONS SURVEY TOTALS	149	_

3. THE SURVEY INSTRUMENT

The Business survey instrument was separated into three parts:

Part 1. Questions were included to identify business occupations for which employers were having difficulties in finding qualified applicants.

Part 2. Questions in this area related to the general survey regarding overall employer satisfaction with public education, vocational education, entry-level preparation, and employee work habits.

Part 3. Questions from this area were chosen from the intended outcomes of the selected programs as stated in the <u>Vocational Course Code Standards Manual</u>. They represent the competency areas associated with overall preparation of the clerical operation programs from which data was desired. The intended outcomes for the clerk



typist and the data entry operations programs were very similar, as were the outcomes for accounting operations with the addition of specific accounting procedures and business law concepts.

A copy of the questionnaire and accompanying letter is provided in Appendix C. The package consisted of a survey instrument, an introductory letter from a representative of the Department of Education's Business Services Technical Committee, and a postage paid business reply envelope.

4. THE SURVEY PROCESS

The initial survey mailout to one hundred forty-nine employers occurred on January 15, 1991. This was followed by two remails to survey non-respondents on February 4th and 20th, 1991. Each employer received a program specific letter and survey instrument designed for the specific program for which data was desired.

5. RESPONSES

A total of one hundred responses was received from employers. This represented an overall response rate of sixty-nine percent. Table 6 reflects the business survey response by program.

Ta	Ne	6
10		v

VOCATIONAL PROGRAM	NUMBER OF EMPLOYERS	EMPLOYER RESPONSES	RESPONSE RATE
ACCOUNTING OPERATIONS	48	33	69%
CLERK TYPIST	50	33	66%
DATA ENTRY OPERATIONS	51	34	67%
BUSINESS SURVEY TOTALS	149	100	67%

It is felt that employer response was higher than the general survey due to the clear association between specific training and employment. Employers could clearly identify and evaluate their satisfaction with those associated with the occupations of accounting clerk, clerk typist and data entry operator within their employ.

B. FINDINGS

"We have found that many clerical entry-level positions have requirements that new graduates cannot meet at this time: Speed and accuracy entering on a computer. Knowledge of the most popular word processing systems."

... A Florida Employer

Graphs used in this section use only "satisfied" and "dissatisfied" responses. "I don't know" and "average" responses were not included. These responses are used in a discussion that is provided in Section V and Appendix C of the report.



The Graphs are based on a numerical assignment of "2" for each satisfied response, and a "1" for each dissatisfied response. These assignments were tallied for each response and the total was divided by the total number of responses in each query area to obtain a final "score". Responses that reflected "average" or "I don't know" were not included. This approach provides a more concentrated level of either employer satisfaction or dissatisfaction.

1. HIRING NEEDS

This first inquiry area requested that employers identify those business occupations in which they were experiencing difficulties in finding qualified applicants. Occupations were selected from those business program areas represented in the <u>Vocational Education Program Course Standards Manual</u> and are in accord with the Occupational Employment Statistics Program taxonomy. There were twenty-four occupations listed and an open-ended/other/future needs area made available for comment. Employers could identify as many areas of difficulty as was appropriate. Figure 11 shows the Florida business employer's response to this question area for the ten occupations where needs were identified as being highest.

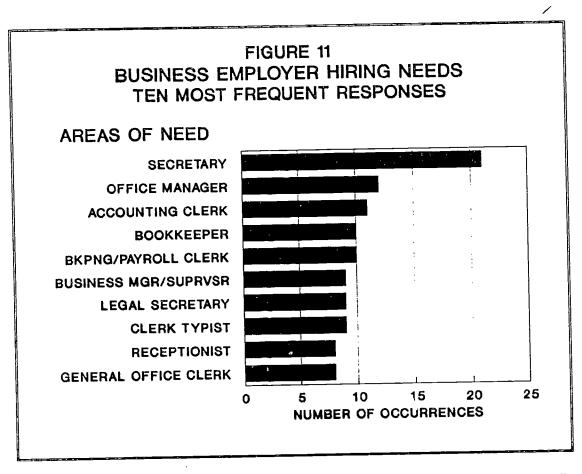


FIGURE 11 COMMENTS: The occupation reflecting the most need for qualified applicants was secretary. Office manager and accounting clerk were the next two most frequently mentioned occupations.



2. PUBLIC EDUCATION SYSTEMS

Employers were asked to reflect their general level of satisfaction with public education, vocational education, entry-level job preparation, and employee work habits. Figure 12 is a graphical presentation of reactions to these four areas and their calculated levels of satisfaction from the general opinion survey. In reviewing the graphs, a score of "1.50" should be considered the dividing line between "satisfied" and "dissatisfied".

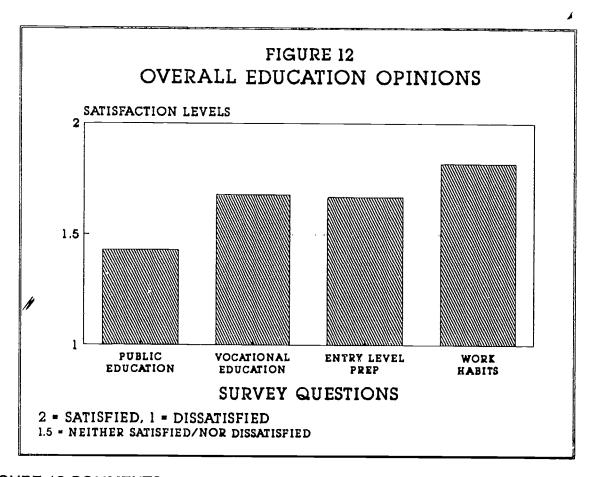


FIGURE 12 COMMENTS: Responses indicated that employers were generally satisfied with vocational education, entry-level preparation, and especially satisfied with employee work habits. They were less than satisfied with public education. These responses are consistent with findings in other sections of the report.

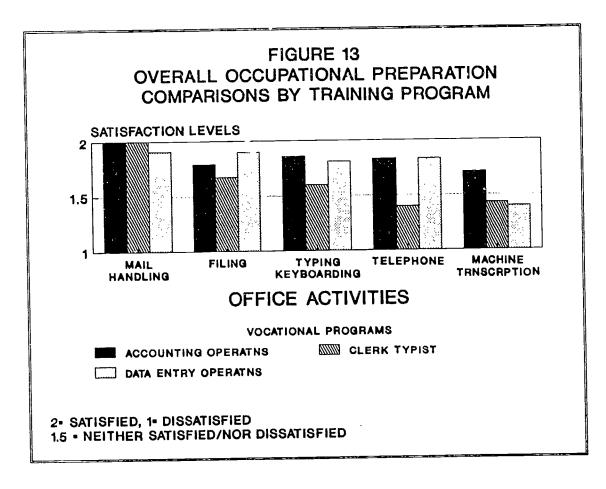


3. OVERALL OCCUPATIONAL PREPARATION

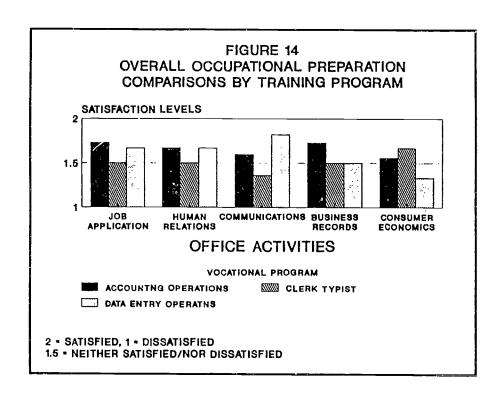
Questions about work force preparation were separated into three general areas: job-related skills or office activities, personal management skills, and basic skills. Each of these areas included a series of questions that helped to define specific components. These three general areas with their specific internal components are displayed graphically in Figures 13, 14, 15 (office activities), 16 (personal management skills), and 17 (basic skills). Each graph reflects the respective levels of employer satisfaction for each of the selected specific programs surveyed.

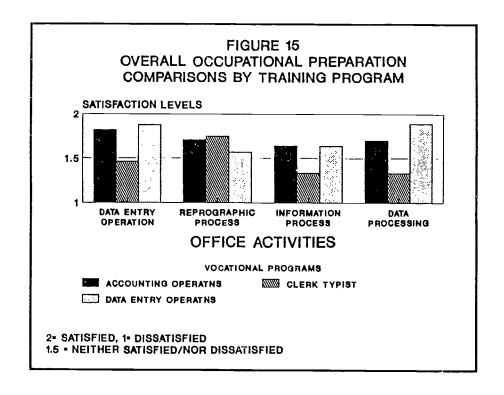
a. Office Activities

Figures 13, 14, and 15 reflect employer satisfaction levels pertaining to a variety of office activities associated with the specific programs in review.









FIGURES 13, 14, AND 15 COMMENTS: Of the fourteen office activities depicted in the graphs, four were rated as satisfactory or above by employers for each of the three vocational programs reviewed. Only the performance of machine transcription activities registered levels of dissatisfaction by employers from two programs - the clerk typist and the data entry operations programs. Note the constantly lower employer satisfaction levels for a majority of office activities within the clerk typist vocational program and the higher satisfaction levels associated with the accounting operations program.



b. Personal Management Skills

Figure 16 depicts employer satisfaction with employee grooming habits, leadership skills, and decision-making skills for each of the specific vocational programs reviewed.

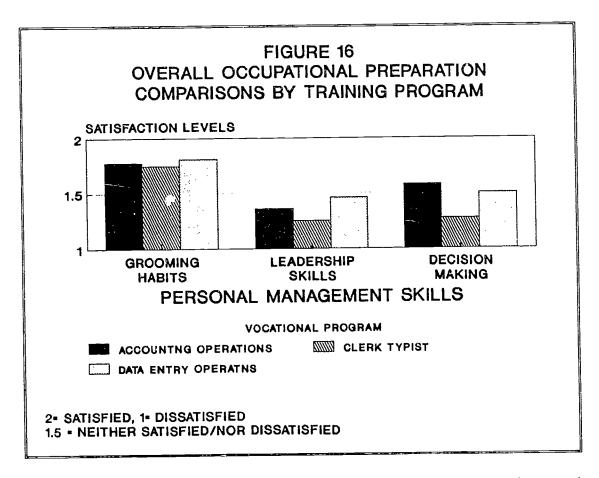


FIGURE 16 COMMENTS: Note that only grooming habits within this area reflect employer satisfaction. Particularly low are the scores associated with leadership skills for all programs.



C. Basic Skills

"Employees must <u>speak, read, and comprehend English.</u> This should be a prerequisite. Especially for Florida's State & County employees! No one should be employed by county, city, or state without these skills!"

... A Florida Employer

Figure 17 depicts the basic skills of math, verbal and written communication for each of the specific business programs.

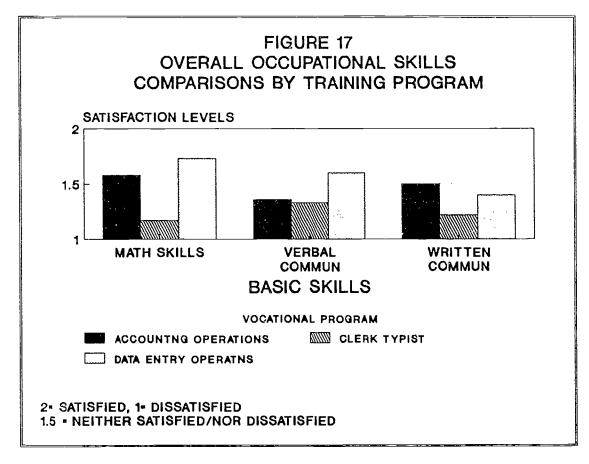


FIGURE 17 COMMENTS: Note the low scores for all basic skills within the clerk typist program and the much higher scores for the math and verbal communication skills within the data entry operations program. These findings, with respect to basic skills preparation, are consistent with other findings elsewhere in the report.

C. RECOMMENDATIONS

It is recommended to continue a specific program survey(s) within an area of need by the Divisions of Community Colleges and Vocational, Adult, and Continuing Education Program Review schedule for FY 1991-92.



SECTION V: SELECTED ANALYSIS

"Employees need a positive attitude towards work and perhaps a rudimentary knowledge of business economics/operations."

... A Florida Employer

This section of the report presents different combinations of opinion survey data mixed with FETPIP data. The intent of this section is to show the broad range of available data elements and to generate areas of thought and questions for future data collection and analysis efforts.

In the first part of this section, the change in survey response categories to this year's general survey is reviewed. Next the "core" four questions within each survey are depicted. Then, each survey from this year is summed by either size or industry type to reflect differences in employer responses and potential needs. Finally, the last part compares overall employer satisfaction, training relatedness, and average quarter wages for each of the three surveys.

A. FINDINGS

1. SURVEY RESPONSE CATEGORY COMPARISONS

As described earlier in the report, the response category of "no opinion" was eliminated in the surveys and the responses of "average" and "I don't know" were substituted. This first comparison is presented to show how the changing of the survey response options affected the analysis of employer responses. As a reference, last year's general survey data collection recorded an average breakout of employer response as 40% being "satisfied", 29% as "dissatisfied", and 31% having "no opinion". The reason for changing the categories was to obtain a larger percentage of definitive employer responses.

Table 8 reflects an analysis of this year's surveys with respect to the percentages each response category received. The category of either satisfied/dissatisfied is an aggregation of the satisfied and dissatisfied responses.

Table 8

SURVEY TYPE	EITHER SATISFIED/DISSATISFIED	AVERAGE	I DON'T KNOW
General Business Radiology	48% 39% 56%	36% 43% 33%	16% 18% 11%
OVERALL,	47%	37%	16%



The response categories of either "satisfied" or "dissatisfied" received the highest proportion of employer responses for both the general and the radiology surveys. The "average" response received the most in the business survey. Of the 56% with either "satisfied" or "dissatisfied" responses, 92% were satisfied in the radiology survey. Of the 48% within these same categories for the general survey, 60% were satisfied, and for the business survey, 62% were satisfied. The responses varied with each particular query within each survey. The radiology survey reflected the least amount of "I don't know" responses. The business survey generated the most "average" responses and the most "I don't know" responses. The survey questions related to public education and basic skills received the most dissatisfied responses, while those queries related to vocational education and specific occupational preparation areas received the most satisfied responses.

If one considers the "average" response as "satisfied" then 84% of the employer response to this year's general survey registered a determinable response in comparison to 69% from the last year's general survey. Similarly, more of the specific survey responses reflected higher levels of satisfaction in comparison to the general survey.

2. FOUR COMMON QUESTIONS

Four questions have appeared on all surveys. These questions refer to inquiries regarding employers' satisfaction with Florida's general education system (vocational and public), entry-leval employee preparation, and employee work habits. Figure 18 reflects the levels of satisfaction for these four questions and an overall aggregation of responses regarding work habits and occupational preparation for each of the three surveys conducted during the 1990-91 project year.

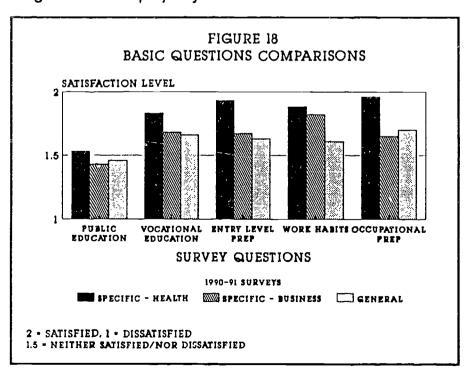




FIGURE 18 COMMENTS: The graph shows the satisfaction levels of employers concerning public education to be oensiderably lower than those associated with vocational education, employee preparation, and employee work habits. Also, specific survey responses, the health survey in particular, consistently show higher levels of employer satisfaction. The higher satisfaction levels are likely due to the direct levels of application of training associated with the specific radiology and business programs. This may also suggest that employers from the general survey had difficulty associating questions to specific jobs and correlating them back to a program of training. Thus they registered lower opinion levels and were less likely to respond.

"Apprenticeship training with on-the-job experience turns out better employees than vocational training alone."

... A Fiorida Employer

3. GENERAL SURVEY BY FIRM SIZE

The responses for each question in the 1990-91 general survey within the three areas of basic, job-associated, and communicative or interpersonal skills have been aggregated to produce satisfaction levels for each area. Figure 19 represents those aggregate levels of satisfaction for three categories of employer size category.

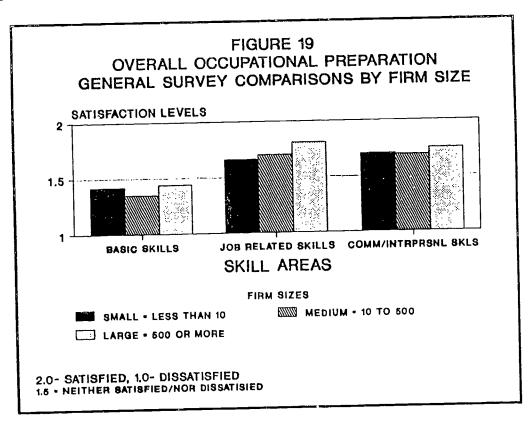


FIGURE 19 COMMENTS: Three observations are evident from the graph: 1.) all firms, regardless of size, are dissatisfied with the basic skill preparation of employees, 2.) large firms reflected higher levels of satisfaction for each skill area represented, and 3.) all firms were satisfied with both job-related and communicative or interpersonal skill preparation.



4. BUSINESS SURVEY- INDUSTRY COMPARISONS

"I have hired one employee from vocational program at a public high school. She is an outstanding person. I am skeptical that her excellence could be a function of her training."

... A Florida Employer

The following two graphs show differences when overall preparation areas and basic skills are compared by different industry types. Of the one hundred survey respondents to the specific business survey, 87 are represented within the following industries: retail and wholesale trade (12), finance (11), business services (13), other services (34)**, and public administration (17). Figure 20 aggregates the three skill areas of office activities, personal management skills, and basic skills to produce satisfaction levels for each skill area within each industry type. Figure 21 reflects the basic skill areas of math computation along with verbal and written communication for the same five industry types.

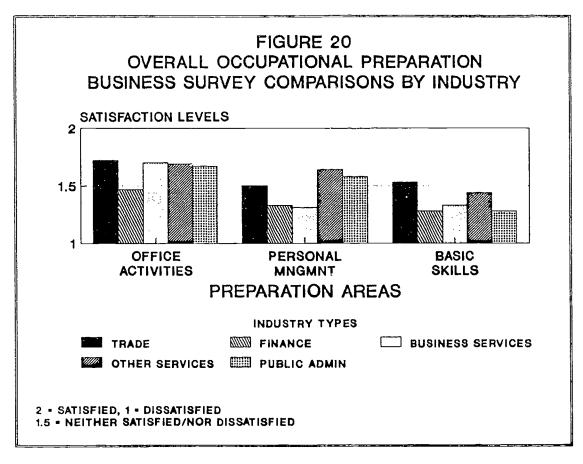


FIGURE 20 COMMENTS: The trade industry reflects the higher levels of satisfaction for both the office activities and basic skill preparation, while the finance industry consistently reflects the lowest levels of satisfaction for all preparation areas.



^{**} The 34 service industry respondents are comprised primarily of firms from health and education services.

"Improved basic education skills and improved verbal and written communication skills are what's needed from an employee."

... A Florida Employer

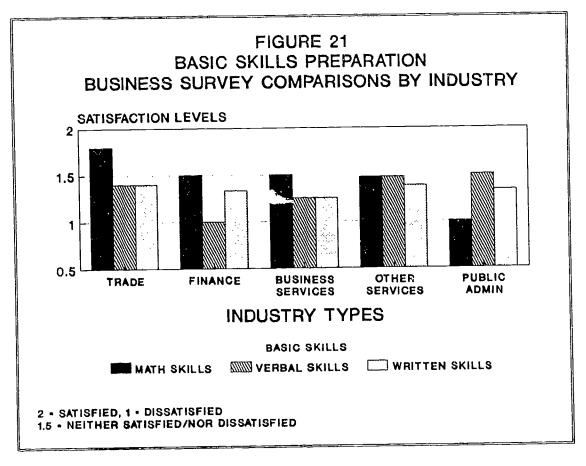


FIGURE 21 COMMENTS: Verbal and written skills generally reflected lower levels of employer satisfaction while math computation reflected higher, though still dissatisfied, ratings. Of the industry types displayed, public administration firms reflected the opposite of the previous statement. Public administration firms were less pleased with math computation than they were with verbal and written communication skills. Overall, the majority of basic skills reflected dissatisfaction within each type of business employer. Only math skills within the trade industry reflected a level of employer satisfaction.



5. HEALTH - INDUSTRY TYPE COMPARISONS

Of the 50 respondents to the specific radiology survey, 33 were from hospitals and 17 were from doctor's offices. These two industry classifications employed 91% of the survey respondents. The remaining 9%, 5 firms, represented other health care settings. Figure 22 reflects an overall comparison of the two employment settings.

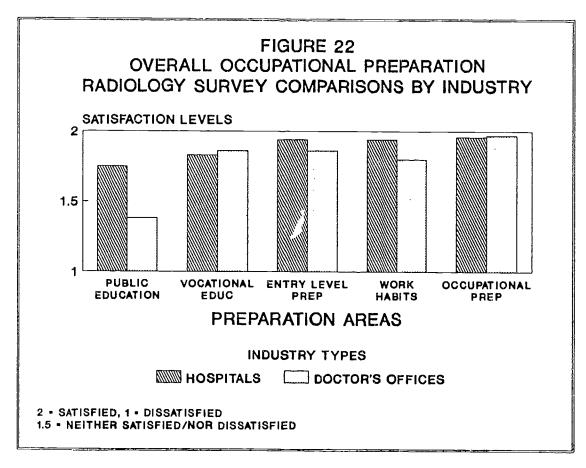


FIGURE 22 COMMENTS: Hospitals consistently reflected comparable or higher levels of employer satisfaction with respect to the selected survey elements. Of particular interest is the level of dissatisfaction reflected by doctors' with respect to public education. Hospitals were more satisfied than were doctors' with the entry level preparation and work habits of their employees.

OVERALL COMMENTS ON COMPARISONS: Figures 18 - 22 show aggregated data that have been presented in a different fashion throughout the report. These four graphs highlight potential areas of employer need with respect to the industry type and the size of a firm. Small-size and medium-size employers are less satisfied with all areas of preparation and have different needs than their larger counterparts. Different industry types employing similar occupations having completed the same programs also reflect variances in their levels of satisfaction within each of the specific occupational areas reviewed. This points to the difficulty of formulating a common "core" of necessary skills without recognizing the differences of varying types and sizes of employers.



6. THE LINK BETWEEN TRAINING RELATEDNESS AND EMPLOYER OPINIONS

As was discussed previously, the employer opinion survey series is an adjunct activity of the Florida Education and Training Placement Information Program (FETPIP). Among other things, FETPIP collects earnings information from the Department of Labor and Employment Security and occupational information from employers. In this part of the report, overall satisfaction levels for the three surveys will be compared to the rate of training-related placements for vocational programs included in the employer universes used for sampling. The rate of related placements will be further compared to the average quarterly earnings level for completers from those programs employed in training-related jobs.

The training-related placement rates reflected herein should not be considered comparable to the State Placement Standard. The Standard includes placements in related employment, enrollments in continuing education, and military enlistment. For purposes of meeting the Standard, decisions about the relationships of jobs to training are made at the local level. For this report, those decisions were made by FETPIP staff. Table 9 reflects the data. Continuing education and military enlistment are not included in Table 9's "Training-Relatedness" column.

Table 9

SURVEY TYPE	OVERALL SATISFACTION LEVEL	TRAINING RELATEDNESS	AVERAGE WAGES
GENERAL SURV	/EY 1.61	61%	\$ 3,072
BUSINESS SURV		71%	\$ 2,652
HEALTH SURVE		91%	\$ 4,831

Table 9 shows that the highest degree of training-related employment was for completers of radiologic technology- type programs. Overall employer opinion ratings were also the highest as were the average quarterly earnings of those placed in field. The programs addressed in the broader general survey had the lowest ratings and related placement rates. Business program employers reflected opinion ratings and training relatedness rates between the other two surveys. The quarterly earnings, however, do not follow this sort of rank order.

In future reports, attempts, like this one, will be made to relate the findings from employer opinion surveys to data that describe the employment of students after program participation. It is hoped that the relationships will help to further illuminate the association of programs and jobs.



40

SECTION VI: EMPLOYABILITY PROFILE

"Schools need to explain good work habits and develop them! Be responsible. Employees need to understand things like getting to work on time; limiting phone calls; taking pride in their work; following a dress code; and producing during work hours."

... A Florida Employer

A. BACKGROUND

The purpose of developing an employability skills profile is to identify a core set of skills and behaviors employers believe to be important to success in the current workplace. Because the results of the employer opinion survey have continually shown employer concern regarding the adequacy of employee basic skills, an attempt has been made to identify a list of basic skill competencies that could be used in employer inquiries. The purpose would be to structure feedback from employers that could impact basic educational curriculum through surveys. Survey items were developed with input from professionals from industry, labor, government, and education. Employability skills were defined in three broad areas: Academic, Personal Management, and Teamwork Skills. Once a list was developed, it was presented to employers for input and discussion. Employers were asked to rate this list of skills and behaviors from critical to not needed. From the variety of professionals providing input, it was believed that workers should probably need some level of competence in all of these skills; the degree of mastery required would be dependent on their jobs, size and type of organization, positions within an organization, and desired career goals. The following list presents the major subcategories within the three categories discussed above.

ACADEMIC SKILLS - include those skills that provide the basic educational foundation necessary to benefit from further training and education and for further employment. This category encompasses communication, comprehension, quantitative, critical thinking, and science and technology skills.

<u>PERSONAL MANAGEMENT SKILLS</u> - include those skills related to developing the attitudes, abilities, behaviors, and decision-making processes associated with responsibility and dependability. Contained within this category are abilities to: set goals and implement strategies for achieving them, identify and act on personal values, and to demonstrate self-discipline.

TEAMWORK SKILLS - include those skills that relate to an individual's ability to contribute to a group or an organization's growth and development. Included in this category are interpersonal, organizational, negotiation, creativity/innovation, and leadership skills.



The purpose of the Florida effort was two-fold 1.) to verify that these were critical skills for Florida employees to have, and 2.) to determine if from these 86 skills, a core group of overall workforce competencies could be generated. Findings associated with the effort will be presented in the following parts of the report.

B. STRATEGY

A survey instrument was built around the employability skills profile referred to above. The instruments were used to guide face-to-face interviews with a select set of employers. Fifteen employers were selected from the five program/industry areas producing the largest number of vocational program completers. Those postsecondary programs having the highest number of completers were correctional officer, law enforcement, firefighting, practical nursing, nursing assisting, cosmetology, clerical operations, and commercial vehicle driving. Selected firms were contacted to review those competencies in light of specific occupations in an attempt to generate a "core" of general employee competencies.

C. THE SURVEY INSTRUMENT

As described above, employability skills were defined in three broad areas: Academic-those skills which provide the basic foundation necessary for a person to get, keep, and progress on a job; Personal Management- those skills related to developing the attitudes and behaviors required to get, keep, and progress on a job; and Teamwork Skills- those skills needed to work with others on a job. These were refined into 26 subclassifications, which were further divided into 86 specific skills and behaviors. A facsimile of the survey instrument is presented in Appendix D.

C. FINDINGS

As a means of analysis, each competency was given a value of "3" for each critically needed response, a "2" for each highly needed, a "1" for each somewhat needed, and a "0" for each not needed response. This total was divided by the total number of competencies within that area to produce a final score. Table 10 shows the results of these calculations.



Table 10

EMPLOYABILITY SKILLS	ACADEMIC	PERSONAL MANAGMNT	TEAMWORK	OVERALL
OVERALL	2.33	2.43	2.29	2.35
Nursing	2.72	2.83	2.81	2.79
Nursing Administrators	2.22	2.50	2.75	2.49
Agency Nursing Coordinators	3.00	3.00	3.00	3.00
Current Nurses	2.93	3.00	2.67	1.90
Commercial Vehicle Driving	2.21	2.00	1.50	2.36
Employer #1	1.71	2.50	2.00	2.07
Employer #2	2.71	1.50	1.00	1.74
Public Service	2.15	2.67	2.25	2.36
Fire Fighting	2.29	2.50	2.50	2.43
Correctional Officer	2.00	2.75	2.00	2.25
Clerical/Technical	1.99	1.95	2.33	2.09
Employers - Insurance	2.03	2.27	2.16	2.15
Utilities	1.95	1.62	2.49	2.02
Educators	2.60	2.69	2.58	2.52
DCC*	2.57	2.50	2.50	2.52
DVACE**	2.67	2.83	2.74	2.75
TCC***	2.57	2.75	2.50	2.61

^{*} Division of Community Colleges, ** Division of Vocational, Adult, and Community Education,

Employers of nurses rated all skills areas as between "highly needed" and "critically needed" with personal management skills as those skills most needed. These were followed by teamwork and then academic skills. The skill area of personal management was rated the highest overall by all survey respondents while teamwork skills rated the lowest. However, all were rated as being "highly needed". Only the overall scores of the commercial vehicle driving respondents had a score below "highly needed" with the teamwork skill being ranked "somewhat needed".



^{***} Tallahassee Community College

Findings show that nearly all of the skills received high ratings, indicating a high level of need for most of the skills found on the survey. Personal management skills were emphasized by employers, particularly for nurses, public service employers, and educators.

Table 11 which shows those competencies which were felt to be "most needed" and "least needed" for those employers contacted within specific survey categories.

Table 11

COMMUNICATION

MOST NEEDED

Answer questions accurately
Recognize and understand enough words to read simple instructions
LEAST NEEDED

Combine and use information from other sources Write sentences and paragraphs using correct grammar Organize and translate thoughts into written communication

APPLIED SCIENCE AND TECHNOLOGY

MOST NEEDED

Follow safety rules for specific equipment
Understand and use computer/data processing terminology
Demonstrate keyboarding skills
LEAST NEEDED

Apply basic knowledge of natural sciences Demonstrate computer programming and networking skills

QUANTITATIVE/ANALYTICAL

MOST NEEDED

Perform basic calculations
Recognize and define problems on the job
Select the best solutions to a problem
LEAST NEEDED

Understand a foreign language
Measure using metric measuring system
Calculate distance, weight, volume, and time
Understand and apply simple probability and statistics



WORKPLACE ENVIRONMENT

MOST NEEDED

Follow safety rules and practices

LEAST NEEDED

Operate technical equipment, tools, instruments

Determine the right tool for the task

RESPONSIBILITY/VALUES

MOST NEEDED

Demonstrate honesty and integrity
Be free from substance abuse
LEAST NEEDED

Demonstrate self-control

Demonstrate appropriate grooming habits

CAREER DEVELOPMENT

MOST NEEDED

Exhibit self-esteem and self-confidence
Exhibit skills that apply to more than one job

LEAST NEEDED

Follow a plan to achieve career goals

TEAMWORK

MOST NEEDED

Represent organization in a positive manner
Follow organizational rules, procedures, and policies
Cooperate with others to get the job done
Accept constructive criticism of performance and ideas
LEAST NEEDED
Use a team approach to identify problems and devise solutions
Determine when to be a leader or a follower

DEALING WITH CHANGE

MOST NEEDED

Show initiative; be a self-starter

Meet or exceed requirements for work quality

Complete tasks in the face of job pressures or stresses

Work productively with minimum supervision

LEAST NEEDED

Know when it is desirable to update one's skills and knowledge Generate new ideas for getting the job done



Employers felt that "core competencies" existed within all areas of the survey. However, there was no agreement on the specific level of need for these specific elements. Rather, many varied significantly depending on the particular occupation or level of knowledge necessary for a particular job. As an example, computer-associated skills were reflected as "not needed" by the law enforcement officers, firefighters, and for a majority of nursing situations while being critical to the activities of the clerical and accounting occupations.

C. RECOMMENDATIONS

It is felt that the Employability Skills Profile depicts a "core" of occupational competencies which employers would like all entry-level employees to have. It is also felt that the variance with which these skills may differ in a particular job or within different industry types or sizes is great. It is recommended that a continued effort be made to further define and understand those specific skill levels that are needed within those specific occupational settings predominantly associated with current variational preparation. Particular emphasis should be directed towards the areas of personal management and career development which are not currently focal points of training preparation. Specifically, a manageable number of employers should be interviewed to define the levels of basic skills competencies associated with the primary occupational settings mentioned above.

"Without work, all life goes rotten. But when work is soul-less, life Stifles and dies."

... Albert Camus



46

Appendix A

The General Survey Package

1.	Facsimile of the Brochure Type Survey Instrument	47
2.	General Survey Follow-Up Letter	49
	General Survey Thank You Letter	51
	General Survey Satisfaction Levels Using the 2-Point Scale	53
	General Survey Satisfaction Levels Using the 5-Point Scale	54



Dear Se or Madem

programs is vital to the health of Florida's education system. As employers, we are faced with an increasing need for employees who can keep up with nechoology, continue to learn while on the job, and have entry level The involvement of employers in the evaluation of vocational

The performance of publicity funded vocational programs is Florida is assessed based on several types of information. One involves an examination of employment experience of former students. Another involves the level of succisation of Florida employers with the training received by these former students.

public vocanonal education in Florida. You were selected to contribute to this survey because your firm is one of many who has employed a former Florida Department of Education by requesting your response to an opinion survey. The survey deals with the level of your satisfaction with The Florida Education & Industry Coalition is supporting the receptent of vocational training within the State of Florida.

Please direct the attached survey form to the person in your firm who is responsible for personned matters. The survey questions will take only a few moments of his/her time to complete.

nence. However, if you wish, your reposse and can be called in to the Placement Information Program by calling Sam Berto at 1904/488–1987, A postage-paid meturn response card is attached for your conveThe Rorida Department of Education will analyze all responses and the results will be used to improve program planning. Your response will be kept confidencial.

Thank you in advance for your cooperation.

Y COOL

Michael C. Hill, Charman

MEL/pv Attachment

EMPLOYER OPINION SURVEY

3177

욋

Sponsored by the Florida Department of Education and the Florida Chamber of Commerce

	-
ULKELLIONS - DENSE TEKS THEN MAINTHEN ONLOW, THEN PROVIDE THE AIR	-
ewer next to the correct number on the answer sheet. Tear off answer sheet	-
	•

PART A - HIRING NEEDS

- Identify those job categories for which you currently have difficulty finding qualified applicants.
 - g) Personnel services
 h) Protective services
 l) Cleaning services
 j) Health services
 k) No difficulty Management/administrative
 - Clerical/administrative
 - c) Production/operating d) Professional/technical
- e) Maintenance/material handling () Food services
 - Food services
- Please identify specific to talks related to these energories where applicants are needed or where future needs are annupated.

able of a

PARTB

schools, area vocaconal centers, community colleges, and state universities. Florida's public education system includes dementary, middle, and high Vocational programs are offered in high schools, area vocational centers,

describes your feelings. The responses are as follows. (Circle one response Directions: For each of the statements below, curile the response that best and community colleges. for each question.)

P. P. P.	folden i Kren	
2- nearlise	So wary distributions	
1- very semaked	to distantion	

PUBLIC EDUCATION SYSTEMS

- 3. How do you feel about Florida's overall system of public education?
- 4. How do you feel about Florida's overall system of vocational education?

EMPLOYEE PREPARATION AND WORK HABITS

- 5. How would you rate the pot-entry lavel preparation of those who stranded public vocational education programs?
- How would you rate the work habits of those who attended public vocational education programs?

PART C. WORK FORCE PREPARATION

within the areas listed below. Cards the response which best describes 7. Please indicate your level of satisfaction with the preparation of emplayers who completed programs from Florida's vocational system your femilings.

ed

A second	f-14m125	
7	T'aj desta	
	A STANFORD	-

1) Technical job skills 2) Math skills 2) Weiting skills 4) Weiting skills 6) Speaking skills 6) Reasoning dogical thinking skills 7) Quality of work 8) Quality of work 8) Quality of work 9) Quality of work 10) Ability to learn new techniques on the job 2) Ability to communicate with supervisors 10) Ability to work with fellow empkeyees 11) Ability to work with customers or dierus 12) Ability to work with customers or dierus	8. Please specify any additional skills or areas of knowledge desir vocational graduate you would employ.	ANSWER SHEET	PARTA 1. a b c d e f g h i j k 2	PARTB	3.1 2 3 4 5 6 levery saturated	4.1 Z 3 4 5 6 3-reading	5.1 2 3 4 5 6 Severy disensedant	6.1 2 ·3 4 5 6 Let dent theme	PART C	3 4 5 6 10 1 2 3 4	123456 312345	1 2 3 4 5 6 10 1 2 3 4 5	1 2 3 4 5 6 13 1 2 3 4 5	1 2 3 4
######################################	مع اوت اد		<u> </u>	 - X		;	ıń			3 2		₹ 7		<u> </u>

43

EDUCATION & TRAINING PLACEMENT INFORMATION PROGRAM P.O. BOX 5197 TALLAHASSEE, FL 32314-9978

POSTAGE WILL BE PAID BY ADDRESSEE

FIRST CLASS PERMIT NO. 253 TALLAHASSEE, FL

BUSINESS REPLY MAIL

NO POSTAGE
NECESSARY
IN THE
UNITED STATES

Sate of Florida
Department of Education
Fallahasses, Florida
Betty Cestor, Communication
farmative action / equal opportunit

PRESORTED FIRST CLASS MAIL U.S. POSTAGE PAID TALLAHASSEE, FL PERMIT #212

FLORIDA DEPARTMENT OF EDUCATION

EDUCATION & TRAINING PLACEMENT INFORMATION PROGRAM P.O. BOX 5197 TALLAHASSEE, FL 32314-5197





FLORIDA DEPARTMENT OF EDUCATION

Betty Castor Commissioner of Education

Jay J. Pfeiffer, Administrator Florida Education and Training Placement Information Program Office of the Deputy Commissioner

Dear Florida Employer:

You recently received a request for information regarding your firm's opinion of Florida's vocational education system, and the importance you attach to certain elements of employee preparation.

The information that was requested will be compiled with data from other employers for an analysis of employer training and education needs. Each response will be kept confidential. Data will be used for improved planning and accountability of public funds spent on vocational training programs. Your response is very important as a limited number of Florida employers were selected for participation in this effort.

Our records indicate that the data requested of you has not yet been received. Would you please take a few minutes to review and respond to the request?

If you have any questions or require assistance, please call Sam Berto collect in Tallahassee at (904) 488-4987.

If you have already responded to this request, please disregard this remail. Your response and cooperation is greatly appreciated.

Sincerely,

Sam M. Arcangeli Project Director

The Collins Building • Room 224 • Tallahassee, Florida 32399 • (904) 487-0900 An affirmative action/equal opportunity employer





FLORIDA COUNCIL on VOCATIONAL EDUCATION



Florida Education Center Tallahassee, Florida 32399-0400 904/488-5308

> James A. Culligan, Ed.D. Executive Director

Charles "Chic" Perez Fort Lauderdale Chalrman

Jean W. Austell Jacksonville

Frances Baer Cocoa

Jeanine Christian Gainesville

Rhonda G, Hogan Boca Raton

William "Ron" Jeffrles Bartow

Glynn C. Key, Jr. McDavid

Gerrit J. Knodt, Ph.D. Tampa

Russell L. Moncrief Longwood

Eugene A. Poole Lowell Chairman Planning Committee

Eileen Schwartz Hollywood

G. Herb Sheheane Tallahassee Vice Chairman

Joan Tiller Orlando Chairman Evaluation Committee Dear Florida Employer:

I am writing to express my appreciation for your participation in the Florida Employer Satisfaction Survey. Your responses to the questions in the survey will be combined with those of other Florida firms for analysis.

The analysis will focus on how well the vocational education system in Florida has responded to the needs of Florida employers. It will be used both by the Florida Chamber of Commerce and the Florida Department of Education to improve program planning. A graph and brief description of employer survey responses are presented for your review on the back of this letter.

Your participation enhances the partnership between the private sector and government sponsored education and training programs. Again, thank you for your assistance.

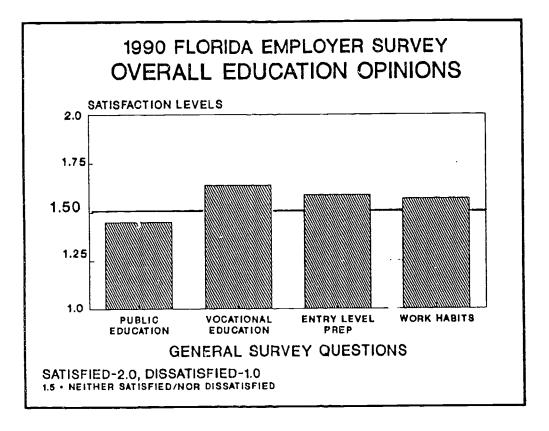
If you have any questions or suggestions, please contact Mr. Jay Pfeiffer (collect) at 904/487-0900.

Sincerely,

Charles R. Perez

Chairman





This graph was developed from employers who, like you, responded to the Florida Employer Opinion survey. The survey was directed to a sample of employers known to have hired a person who had completed a vocational training program in Florida. The graph represents opinions about Florida's general and vocational education systems. It also represents employer opinions about the entry-level preparation and work habits of their employees.

The graph is based on an assigned score of "2" for each satisfied response and "1" for each dissatisfied response. "No opinion" — type response were not included in the scoring system. The accres for each response were then tallied and the total was divided by the number of responses to get an average — or final — score. Therefore, a score of "1.5" represents the dividing line between "satisfied" and "dissatisfied".

The graph shows that employers who responded to the opinion survey were generally not satisfied with the overall system of public education in Florida. This was reflected in employer opinions about the basic educational preparation of employees as well. Employers were generally satisfied with vocational education. This was reiterated in their opinions about the technical and job-specific skill preparation of their employees. The graph also shows a slight level of satisfaction with the entry level preparation and work habits of their employees.

If you are interested in further details, please contact the Florida Education and Training Placement Information Program, we will be happy to provide you with a full report from the survey.

Florida Education and Training Placement Information Program
Suite 224 Leroy Collins Bldg.
107 W. Gaines Street
Tallahassee, Florida
32399



1990-91 FLORIDA EMPLOYER GENERAL OPINION SURVEY

2 POINT SCALE - using only the satisfied or dissatisfied responses.

NUMBER OF EMPLOYER RESPONSES	900
TOTAL DELIVERABLE EMPLOYER SURVEYS	2907

OVERALL EDUCATION OPINIONS

	OVERALL	SMALL	MEDIUM	LARGE
PUBLIC EDUCATION	1.46	1.44	1.47	1.47
VOCATIONAL EDUCATION	1.66	1.66	1.66	1.73
ENTRY LEVEL PREPARATION	1.63	1.60	1.58	1.70
WORK HABITS	1.61	1.53	1.62	1.77

WORK FORCE PREPARATION

BASIC SKILLS

MATH SKILLS READING SKILLS WRITING SKILLS SPEAKING SKILLS	1.39 1.39 1.28 1.43	1.42 1.33	1.35 1.40 1.24 1.41	1.45
SPEAKING SKILLS REASONING SKILLS	1.39		1.35	1.60

JOB-RELATED OR ASSOCIATED SKILLS

TECHNICAL JOB SKILLS	1.81	1.72	1.84	1.88
QUALITY OF WORK	1.58	1.54	1.57	1.74
QUANTITY OF WORK	1.60	1.56	1.59	1.77
FAMILIARITY WITH JOB RELATED EGUIPHENT	1.70	1.69	1.69	1.76
ABILITY TO LEARN NEW TECHNIQUES	1.81	1.81	1.79	1.88

COMMUNICATIVE OR INTERPERSONAL SKILLS

ABILITY TO COMMUNICATE WITH SUPERVISORS	1.63	1.63	1.62	1.69
ABILITY TO WORK WITH FELLOW EMPLOYEES	1.82	1.83	1.81	1.83
ARTITY TO WORK WITH CUSTOMERS OR CLIENTS	1.66	1.65	1.65	1.73

AS A RESULT OF PRIOR YEAR FINDINGS THE RESPONSE CATEGORY OF NEITHER SATISFIED/NOR DISSATISFIED WAS SUB-DIVIDED INTO AVERAGE AND I DON'T KNOW AS RESPONSES. FOR COMPARATIVE PURPOSES THE THREE COLUMNS OF SATISFACTION LEVELS CALCULATES SATISFIED AND DISSATISFIED RESPONSES, ONLY. FOR EACH SATISFIED RESPONSE A NUMERICAL ASSIGNMENT OF "2' WAS GIVEN, FOR EACH DISSATISFIED RESPONSE A "1" WAS ASSIGNED. THIS TOTAL WAS THEN DIVIDED BY THE TOTAL NUMBER OF RESPONSES IN EACH QUERY AREA TO OBTAIN A FINAL SCORE. THIS RESULTS IN A MEDIAN SCORE OF 1.5, OR THE DIVIDING POINT BETWEEN SATISFIED AND DISSATISFIED.



1990-91 FLORIDA EMPLOYER GENERAL OPINION SURVEY

5 POINT SCALE - using satisfied, dissatisfied, and average responses.

NUMBER OF EMPLOYER RESPONSES 900 TOTAL DELIVERABLE EMPLOYER SURVEYS 2907

OVERALL EDUCATION OPINIONS

	OVERALL	SMALL	MEDIUM	LARGE
PUBLIC EDUCATION	2.90	2.87	2.90	2.97
VOCATIONAL EDUCATION	3.20	3.16	3.19	3.31
ENTRY LEVEL PREPARATION	3.13	3.12	3.11	3.26
WORK HABITS	3.08	3.00	3.07	3.32

WORK FORCE PREPARATION

BASIC SKILLS

MATH SKILLS	2.82	2.92	2.77	2.87
READING SKILLS	2.77	2.90	2.77	2.92
WRITING SKILLS	2.63	2.71	2.59	2.74
SPEAKING SKILLS	2.87	2.92	2.86	2.91
REASONING SKILLS	2.82	2.78	2.79	3.06

JOB-RELATED OR ASSOCIATED SKILLS

TECHNICAL JOB SKILLS	3.36	3.31	3.36	3.49
QUALITY OF WORK	3.06	3.05	3.04	3.23
QUANTITY OF WORK	3.08	3.06	3.04	3.30
FAMILIARITY WITH JOB RELATED EQUIPMENT	3.24	3.29	3.20	3.35
ABILITY TO LEARN NEW TECHNIQUES	3.34	3.41	3.28	3.43

COMMUNICATIVE OR INTERPERSONAL SKILLS

ABILITY TO COMMUNICATE WITH SUPERVISORS	3.13	3.17	3.09	3.19
ABILITY TO WORK WITH FELLOW EMPLOYEES	3.34	3.40	3.32	3.35
ABILITY TO WORK WITH CUSTOMERS OR CLIENTS	3.17	3.21	3.13	3.22

CALCULATIONS TO OBTAIN A SATISFACTION LEVEL USE A 5-POINT SYSTEM OF "5" FOR EACH VERY SATISFIED, "4" EACH SATISFIED, "3" FOR EACH AVERAGE, "2" FOR EACH DISSATISFIED, AND A "1" FOR EACH VERY DISSATISFIED RESPONSE. THIS TOTAL IS THEN DIVIDED BY THE TOTAL NUMBER OF RESPONSES TO PRODUCE A FINAL SCORE. THIS RESULTS IN A MEDIAN SCORE OF "3.00" WHICH IS THE SEPARATION BETWEEN A SATISFIED AND DISSATISFIED RESPONSE. "I DON'T KNOW"-TYPE RESPONSES WERE NOT USED IN THE CALCULATIONS.



Appendix B

The Health Survey Package

1.	Introductory Letter from the Office of Radiation Control	57
2.	Radiology Survey Instrument	59
	Radiology Survey Follow-Up Letter	61
4.	Radiology Survey Thank You Letter	63
5.	Health Survey Satisfaction Levels Using the 2-Point Scale	65
	Health Survey Satisfaction Levels Using the 5-Point Scale	66



OFFICE OF RADIATION CONTROL RADIOLOGIC TECHNOLOGY PROGRAM

Dear Sir or Madam:

The performance of publicly funded vocational programs in Florida is assessed based on several types of information. One involves an examination of employment experiences of former students. Another involves the level of satisfaction of Florida employers with the training received by these former students.

The involvement of employers in the evaluation of vocational programs is vital to the health of Florida's education system. As employers, we are faced with an increasing need for employees who can keep up with technology, continue to learn while on the job, and are capable of performing entry level job skills.

As Program Manager of the Office of Radiation Control, I would like to request your participation in an opinion survey sponsored by the Florida Department of Education. The survey deals with employer hiring needs, their levels of satisfaction with the preparation of specific occupational areas and with Florida's public education systems in general.

You were selected to contribute to this survey because your firm is one of many who have employed a former student of a public vocational education program. The survey requests your level of satisfaction with the preparation of employees within the area of radiologic technology.

Please direct the attached survey form to the person in your firm who clearly understands the occupational area for which information is requested. The survey questions will take only a few moments of his/her time to complete.

A postage-paid return envelope is included for your convenience. However, if you wish, your response can be called in to the Placement Information Program by calling Sam Berto at (904) 488-4987, collect.

The Florida Department of Education will analyze all responses and the results will be used to improve program planning. Your response will be kept confidential.

Thank you in advance for your cooperation.

Sincerely, Gory L. Tomosgewski.

Gary Tomazewski Program Hanager

> (904) 487-3451 1317 WINEWOOD BOULEVARD • TALLAHASSEE, FLORIDA 32399-0700

BOB MARTINEZ, GOVERNOR

GREGORY I. COLER. SECRETARY



PARAPROFESSIONAL HEALTH EMPLOYER OPINION SURVEY

SPONSORED BY

THE FLORIDA DEPARTMENT OF EDUCATION AND THE FLORIDA DEPARTMENT OF HEALTH AND REHABLITATIVE SERVICES OFFICE OF RADIATION CONTROL

PART A

Directions: Read each statement carefully and circle the letter of the answer that best applies to you.

HIRING NEEDS

- 1. Identify those occupations for which you currently have difficulty finding qualified applicants. (You may circle more than one.)
 - A. Registered nurse
 - B. Licensed practical nurse
 - C. Nursing assistant
 - D. Electrocardiograph tech
 - E. Occupational therapy assistant
 - F. Emergency medical tech
 - G. Surgical tech
 - II. Pharmacy tech
 - I. Recreational therapy assistant

- J. Histological tech
- K. Home health aide
- L. Medical lab tech
- M. Medical records tech
- N. Nuclear medicine tech
- O. Respiratory therapy tech
- P. Physical therapy tech
- Q. Mental health assistant
- R. Social work assistant
- Please identify any other job titles/occupations where applicants are needed or that you feel will be needed in the future.

PART B.

Florida's public education system includes elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement.)

- A. Very satisfied
- B. Satisfied
- C. Average

- D. Dissatisfied
- E. Very dissatisfied
- F. I don't know

PUBLIC EDUCATION SYSTEMS

3. How do you feel about Florida's overall system of public education?

ABCDEF

4. How do you feel about Florida's overall system of vocational education?

ABCDEF

EMPLOYEE PREPARATION AND WORK HABITS

5. How would you rate the job entry-level preparation of those who attended vocational education programs?

ABCDEF

6. How would you rate the work habits of those who attended vocational education programs?

ABCDEF



58 \$ 59

58

PART C.

11.

12.

15.

OVERALL OCCUPATIONAL PREPARATION

A. Very satisfied

B. Satisfied

Please indicate your level of satisfaction with the preparation of vocational employees within the areas listed below. Please remember that these statements are with specific reference to the health occupational area of radiologic technology, only.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

D. Dissatisfied

E. Very dissatisfied

ABCDEF

ABCDEF

ABCDEF

	C. Average	F. I don't know	
7.	Apply knowledge of anatomy, physiology, position and radiographic techniques to accurately demonstrated anatomical structures on a radiographic or other	nstrate	
	imaging receptor.		ABCDEF
8.	Evaluate radiographic images for appropriate positioning and image quality.		ABCDEF
9.	Apply the principles of radiation protection for patient, self, and others.	the	ABCDEF
10.	Anticipate and provide patient care and comfor	t.	ABCDEF

13.	Exercise independent judgement and discretion in the	
	technical performance of medical imaging procedures.	ABCDEF
	·	

14.	Demonstrate proper operation of radiologic equipment and accessories.	ABCDEF

16.	Demonstrate knowledge of immune-deficiency diseases, including aids.	ABCDEF
16.	Demonstrate knowledge of immune-deficiency diseases, including aids.	ABCD

17.	Any additional comments,	suggestions,	or	recommendations:
-----	--------------------------	--------------	----	------------------

Recognize emergency patient conditions and initiate

life saving first aid and basic life-support procedures.

Perform quality assurance procedures.

Demonstrate employability skills.

Please place the completed questionaire in the accompanying postage paid envelope and mail to:

FLORIDA DEPARTMENT OF EDUCATION **EDUCATION & TRAINING PLACEMENT** INFORMATION PROGRAM P.O. BOX 5197 TALLAHASSEE, FL 32314-5197





FLORIDA DEPARTMENT OF EDUCATION

Betty Castor Commissioner of Education

Jay J. Pfeiffer, Administrator Florida Education and Training Placement Information Program Office of the Deputy Commissioner

Dear Florida Employer:

You recently received a request for information regarding your firm's opinion of Florida's vocational education system, and the importance you attach to certain elements of employee preparation.

The information that was requested will be compiled with data from other employers for an analysis of employer training and education needs. Each response will be kept confidential. Data will be used for improved planning and accountability of public funds spent on vocational training programs. Your response is very important as a limited number of Florida employers were selected for participation in this effort.

Our records indicate that the data requested of you has not yet been received. Would you please take a few minutes to review and respond to the request?

If you have any questions or require assistance, please call Sam Berto collect in Tallahassee at (904) 488-4987.

If you have already responded to this request, please disregard this remail. Your response and cooperation is greatly appreciated.

Sincerely,

Sam M. Arcangeli Project Director



The Collins Building • Room 224 • Tallahassee, Florida 32399 • (904) 487-(990)

An affirmative action/equal opportunity employer



FLORIDA COUNCIL on VOCATIONAL EDUCATION

Florida Education Center Tallahassee, Florida 32399-0400 904/488-5308



James A. Culligan, Ed.D. Executive Director

Charles "Chic" Perez Fort Lauderdale Chairman

Jean W. Austell Jacksonville

Frances Baer Cocoa

Jeanine Christian Gainesville

Phonda G. Hogan Boca Raton

William "Ron" Jaffries Bartow

Glynn C. Key, Jr. McDevid

Gentt J. Knodt, Ph.D. Tampa

Russett L. Moncrief Longwood

Eugene A. Poole Lowell Chairman Planning Committee

Eileen Schwartz Hollywood

G. Herb Sheheane Taliahassee Vice Chairman

Joan Tiller Orlando Chairman Evaluation Committee

Dear Florida Employer:

I am writing to express my appreciation for your participation in the Florida Employer Satisfaction Survey. Your responses to the questions in the survey will be combined with those of other Florida firms for analysis.

The analysis will focus on how well the vocational education system in Florida has responded to the needs of Florida employers. It will be used both by the Florida Chamber of Commerce and the Florida Department of Education to improve program planning. A graph and brief description of employer survey responses are presented for your review on the back of this letter.

You, participation enhances the partnership between the private sector and government sponsored education and training programs. Again, thank you for your assistance.

If you have any questions or suggestions, please contact Mr. Jay Pfeiffer (collect) at 904/487-0900.

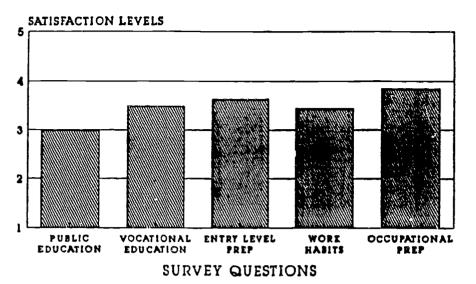
Sincerely,

Charles R. Perez

Chairman



1990-1991 SPECIFIC HEALTH SURVEY RADIOLOGIC TECHNOLOGY



3.00 • MEDIAN/AVERAGE SCORE
5 • VERY SATISFIED, I • VERY DISSATISFIED

This graph was developed from employers who, like you, responded to the Florida Employer Opinion Survey. The survey was directed to employers known to have hired a training-related program completer from a specific vocational training program in Florida. The graph represents opinions about Florida's general and vocational education system. It also represents employer opinions about the entry-level preparation, work habits, and overall occupational skill preparation of their employees.

The graph is based on an assigned score of '5' for each very salisited, '4' for each satisfied, '3' for each average, '2' for each dissatisfied, and 'i' for each very dissatisfied response. 'i don't know' -type responses were not included in the scoring system. The scores for each response were tallied and the total was divided by the number of responses to get an average or -final score. Therefore, a score of '3' represents the median score or the dividing time between 'satisfied' and 'dissatisfied'.

The graph shows that employers who responded to the opinion survey were generally not satisfied with the overall system of public education in Florida. Employers were generally satisfied with vocational education. This was reflerated in their opinions about occupational job—specific skill preparation of their employees. The graph also shows a level of satisfaction with the entry—level preparation and work habits of their employees.

If you are interested in turther details, please contact the Florida Employment and Training Placement Information Program, we will be happy to provide you with a full report from the survey.

FLORIDA EDUCATION & TRAINING PLACEMENT INFORMATION
SUITE 224 LEROY COLLINS BLDG.
107 W. GAINES STREET
TALLAHASSEE, FLORIDA



SPECIFIC SURVEY 1990-91 RADIOLOGIC TECHNOLOGY - 1.91

2 POINT SCALE - using only satsified or dissatisfied responses.

OVERALL EDUCATION OPINIONS		1.79
PUBLIC EDUCATION VOCATIONAL EDUCATION ENTRY LEVEL PREPARATION WORK HABITS	1.53 1.83 1.93 1.88	
OVERALL OCCUPATIONAL PREPARATION		1.96
TECHNICAL/JOB-RELATED SKILLS		
APPLY THE PRINCIPLES OF RADIATION PROTECTION. PERFORM QUALITY ASSURANCE PROCEDURES. APPLY RADIOGRAPHIC TECHNIQUES TO DEMONSTRATE ANATOMICAL STRUCTURES ON AN IMAGING RECEPTOR. DEMONSTRATE PROPER OPERATION OF RADIOLOGIC EQUIPMENT AND ACCESSORIES. EVALUATE IMAGES FOR POSITIONING AND IMAGE QUALITY.	2.00 1.83 2.00 2.00 2.00	
DEMONSTRATE A KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS. DEMONSTRATE EMPLOYABILITY SKILLS. INTERPRETIVE/EVALUATIVE SKILLS	1.97	
	1.97	
ANTICIPATE AND PROVIDE PATIENT CARE AND COMFORT. RECOGNIZE EMERGENCY PATIENT CONDITIONS AND INITIATE LIFE SAVING FIRST AID AND LIFE SUPPORT PROCEDURES.	1.90	
EXERCISE INDEPENDENT JUDGEMENT AND DISCRETION IN THE TECHNICAL PERFORMANCE OF MEDICAL IMAGING PROCEDURES.	1.89	

AS A RESULT OF PRIOR YEAR FINDINGS THE RESPONSE CATEGORY OF NEITHER SATISFIED/NOR DISSATISFIED WAS SUB-DIVIDED INTO AVERAGE AND I DON'T KNOW AS RESPONSES. FOR COMPARATIVE PURPOSES THE THREE COLUMNS OF SATISFACTION LEVELS CALCULATES SATISFIED AND DISSATISFIED RESPONSES, ONLY. FOR EACH SATISFIED RESPONSE A NUMERICAL ASSIGNMENT OF "2' WAS GIVEN, FOR EACH DISSATISFIED RESPONSE A "1" WAS ASSIGNED. THIS TOTAL WAS THEN DIVIDED BY THE TOTAL NUMBER OF RESPONSES IN EACH QUERY AREA TO OBTAIN A FINAL SCORE. THIS RESULTS IN A MEDIAN SCORE OF 1.5, OR THE DIVIDING POINT BETWEEN SATISFIED AND DISSATISFIED.



SPECIFIC HEALTH SURVEY 1990-91 RADIOLOGIC TECHNOLOGY - 3.71

5 POINT SCALE - using satisfied, dissatisfied, and average responses.

OVERALL EDUCATION OPINIONS		3.39
PUBLIC EDUCATION	2.98	
VOCATIONAL EDUCATION	3.49	
ENTRY LEVEL PREPARATION	3.63	
WORK HABITS	3.44	
OVERALL OCCUPATIONAL PREPARAT	ION	3.84
TECHNICAL/JOB-RELATED SKILLS		3.90
APPLY THE PRINCIPLES OF RADIATION PROTECTION.	4.24	
PERFORM QUALITY ASSURANCE PROCEDURES.	3.42	
APPLY RADIOGRAPHIC TECHNIQUES TO DEMONSTRATE ANATOMICAL STRUCTURES ON AN IMAGING RECEPTOR.	3.96	
DEMONSTRATE PROPER OPERATION OF RADIOLOGIC EQUIPMENT AND ACCESSORIES.	4.02	
EVALUATE IMAGES FOR POSITIONING AND IMAGE QUALITY.	3.83	
DEMONSTRATE A KNOWLEDGE OF IMMUNE-DEFICIENCY DISEASES, INCLUDING AIDS.	3.9>	
DEMONSTRATE EMPLOYABILITY SKILLS.	3.85	
INTERPRETIVE/EVALUATIVE SKILLS		3.71
ANTICIPATE AND PROVIDE PATIENT CARE AND COMFORT.	3.93	
RECOGNIZE EMERGENCY PATIENT CONDITIONS AND INITIATE LIFE SAVING FIRST AID AND LIFE SUPPORT PROCEDURES.	3.58	
EXERCISE INDEPENDENT JUDGEMENT AND DISCRETION IN THE TECHNICAL PERFORMANCE OF MEDICAL IMAGING PROCEDURES.	3.62	

CALCULATIONS TO OBTAIN A SATISFACTION LEVEL USE A 5-POINT SYSTEM OF "5" FOR EACH VERY SATISFIED, "4" EACH SATISFIED, "3" FOR EACH AVERAGE, "2" FOR EACH DISSATISFIED, AND A "1" FOR EACH VERY DISSATISFIED RESPONSE. THIS TOTAL IS THEN DIVIDED BY THE TOTAL NUMBER OF RESPONSES TO PRODUCE A FINAL SCORE. THIS RESULTS IN A MEDIAN SCORE OF "3.00" WHICH IS THE SEPARATION BETWEEN A SATISFIED AND DISSATISFIED RESPONSE. "I DON'T KNOW"-TYPE RESPONSES WERE NOT USED IN THE CALCULATIONS.



Appendix C

The Business Survey Package

Introductory Letter from the State Business Services Technical Committee	69
Business Survey Instrument	71
A. Accounting Operations	72
B. Clerk Typist	73
C. Data Entry Operations	74
Business Survey Follow-Up Letter	75
Business Survey Thank You Letter	77
Business Survey Satisfaction Levels Using the 2-Point Scale	79
Business Survey Satisfaction Levels Using the 5-Point Scale	80





FLORIDA DEPARTMENT OF EDUCATION

Betty Castor

Commissioner of Education

Dear Sir or Madam:

The performance of publicly funded vocational programs in Florida is assessed based on several types of information. One involves an examination of employment experiences of former students. Another involves the level of satisfaction of employers with the training received by these former students.

The involvement of employers in the evaluation of vocational programs is vital to the health of Florida's education system. As employers, we are faced with an increasing need for employees who can keep up with technology, continue to learn while on the job, and are capable of performing entry level job skills.

As a member of the Florida State Technical Committee for Business and Office Education, I would like to request your participation in an opinion survey sponsored by the Florida Department of Education. The survey deals with employer hiring needs, their levels of satisfaction with the preparation of employees in specific occupational areas and with Florida's public education systems in general.

You were selected to contribute to this survey because your firm is one of many who have employed a former student of public vocational business education programs. The survey is requesting your level of satisfaction with the preparation of employees within one or all of the selected occupational areas of accounting operations, clerk typist, and data entry operations as is pertinent to your organization.

Please direct the attached survey form to the person in your firm who clearly understands those occupational areas for which information is requested. The survey questions will take only a few moments of his/her time to complete.

A postage-paid return envelope is included for your convenience. However, if you wish, your response can be called in to the Placement Information Program by calling Sam Berto at (904) 488-4987, collect.

The Florida Department of Education will analyze all responses and the results will be used to improve program planning. Your response will be kept confidential.

Thank you in advance for your cooperation.

Sincerely,

Member, State Technical Committee for

Business and Office Education

Tallahassee, Florida 32399

Aftirmative action/equal opportunity employer



BUSINESS EMPLOYER OPINION SURVEY

SPONSORED BY

THE FLORIDA DEPARTMENT OF EDUCATION AND THE FLORIDA STATE TECHNICAL COMMITTEE FOR BUSINESS AND OFFICE EDUCATION

PART A

Directions: Read each statement carefully and circle the letter of the answer that best applies to you.

HIRING NEEDS

- Identify those occupations for which you currently have difficulty finding qualified applicants. (Yt 1 may 1. circle more than one.)
- A. Accounting Clerk
- B. Accountant
- C. Billing Clerk D. Bookkeeper
- E. Billing Machine Operator
- F. Time Keeping Clerk G. Bookkeeping/Payroll Clerk
- H. Posting Clerk

- I. Business Managers/Supervisors
- J. General Office Clerk
- K. Secretary
- L. Legal Secretary
- M. Shipping/Receiving Clerk N. Computer Operator
- O. Data Processing Clerk
- P. Clerk Typist

- Q. Data Entry Clerk
- R. Peripheral Equipment Operator
- S. Business Programmers
- T. Systems Analyst
- U. Court Reporter
- V. Receptionist
- W. Medical Secretary
- X. Office Manager
- Please identify any other job titles/occupations where applicants are needed or that you feel will be 2. needed in the future.

PART B.

Florida's public education system includes elementary, middle, and high schools, area vocational centers, community colleges, and state universities. Vocational programs are offered in high schools, area vocational centers, and community colleges.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. (Circle one response for each statement)

- A. Very satisfied
- D. Dissatisfied

B. Satisfied

E. Very dissatisfied

C. Average

F. I don't know

PUBLIC EDUCATION SYSTEMS

- How do you feel about Florida's overall system of public education? 3.
- ABCDEF
- How do you feel about Florida's overall system of vocational education? 4.
- ABCDEF

EMPLOYEE PREPARATION AND WORK HABITS

- How would you rate the job entry-level preparation of those who attended 5. vocational education programs?
- ABCDEF
- How would you rate the work habits of those who attended vocational 6. education programs?
- ABCDEF

(Please complete additional questions on the reverse side)



OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of vocational employees within the areas listed below. Please remember that these statements are with specific reference to the business occupational area of: Bookkeeping/Accounting Clerks only.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied

D. Dissatisfied

B. Satisfied

E. Very dissatisfied

C. Average

F. I don't know

BOOKKEEPING/ACCOUNTING CLERK

7. Perform telephone activities	ABCDEF
8. Perform math computations	ABCDEF
9. Perform keyboarding/typing activities	ABCDEF
10. Perform filing activities	ABCDEF
11. Perform business records activities	ABCDEF
12. Perform mail handling activities	ABCDEF
13. Perform communications activities	ABCDEF
14. Perform human relations activities	ABCDEF
15. Develop appropriate grooming habits	ABCDEF
16. Perform job application activities	ABCDEF
17. Demonstrate information processing concepts	ABCDEF
18. Develop leadership skills	ABCDEF
19. Perform consumer economics activities	ABCDEF
20. Identify functions of data processing	ABCDEF
21. Perform decision making activities	ABCDEF
22. Operate data entry equipment	ABCDEF
23. Demonstrate knowledge of reprographic process	ABCDEF
24. Perform machine transcription activities	ABCDEF
25. Verbal communication skills	ABCDEF
26. Written communication skills	ABCDEF
27. Identify business law concepts	ABCDEF
28. Perform bookkeeping/accounting activities	ABCDEF
29. Operate data entry equipment	ABCDEF

30. Please specil	y any additiona	I skills or area	s of knowledge	that you feel	a vocational gra	duate you employ
should have.						

Please place the completed questionaire in the accompanying postage paid envelope and mail it to:

FLORIDA DEPARTMENT OF EDUCATION EDUCATION & TRAINING PLACEMENT INFORMATION PROGAM P.O. BOX 5197 TALLAHASSEE, FL 32314-5197



Part C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of vocational employees within the areas listed below. Please remember that these statements are with specific reference to the business occupational area of: Clerk Typist only.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied
B. Satisfied

D. DissatisfiedE. Very dissatisfied

C. Average

F. I don't know

CLERK TYPIST

7. Perform telephone activities	ABCDEF
8. Perform math computations	ABCDEF
9. Perform keyboarding/typing activities	ABCDEF
10. Perform filing activities	ABCDEF
11. Perform business records activities	ABCDEF
12. Perform mail handling activities	ABCDEF
13. Perform communications activities	ABCDEF
14. Perform human relations activities	ABCDEF
15. Develop appropriate grooming habits	ABCDEF
16. Perform job application activities	ABCDEF
17. Demonstrate information processing concepts	ABCDEF
18. Develop leadership skills	ABCDEF
19. Perform consumer economics activities	ABCDEF
20. Identify functions of data processing	ABCDEF
21. Perform decision making activities	ABCDEF
22. Operate data entry equipment	ABCDEF
23. Demonstrate knowledge of reprographic process	ABCDEF
24. Perform machine transcription activities	ABCDEF
25. Verbal communication skills	ABCDEF
26. Written communication skills	ABCDEF
20. 11.1112A	

27. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ should have.

Please place the completed questionaire in the accompanying postage paid envelope and mail it to:

FLORIDA DEPARTMENT OF EDUCATION
EDUCATION & TRAINING PLACEMENT
INFORMATION PROGAM
P.O. BOX 5197
TALLAHASSEE, FL 32314-5197



Part C.

OVERALL OCCUPATIONAL PREPARATION

Please indicate your level of satisfaction with the preparation of vocational employees within the areas listed below. Please remember that these statements are with specific reference to the business occupational area of: Data Entry Operators only.

Directions: For each of the statements below, circle the letter of the response that best describes your feelings. The responses are as follows. (Circle one response for each statement.)

A. Very satisfied

D. Dissatisfied

B. Satisfied

E. Very dissatisfied

C. Average

should have.

F. I don't know

	DATA ENTRY OPERATOR
7. Perform telephone activities	ABCDEF
8. Perform math computations	ABCDEF
9. Perform keyboarding/typing activities	ABCDEF
10. Perform filing activities	ABCDEF
11. Perform business records activities	ABCDEF
12. Perform mail handling activities	ABCDEF
13. Perform communications activities	ABCDEF
14. Perform human relations activities	ABCDEF
15. Develop appropriate grooming habits	ABCDEF
16. Perform job application activities	ABCDEF
17. Demonstrate information processing concepts	ABCDEF
18. Develop leadership skills	ABCDEF
19. Perform consumer economics activities	ABCDEF
20. Identify functions of data processing	ABCDEF
21. Perform decision making activities	ABCDEF
22. Operate data entry equipment	ABCDEF
23. Demonstrate knowledge of reprographic process	ABCDEF
24. Perform machine transcription activities	ABCDEF
25. Verbal communication skills	ABCDEF
26. Written communication skills	ABCDEF

27. Please specify any additional skills or areas of knowledge that you feel a vocational graduate you employ

Please place the completed questionaire in the accompanying postage paid envelope and mail it to:

FLORIDA DEPARTMENT OF EDUCATION EDUCATION & TRAINING PLACEMENT INFORMATION PROGAM P.O. BOX 5197 TALLAHASSEE, FL 32314-5197





FLORIDA DEPARTMENT OF EDUCATION

Betty Castor

Commissioner of Education

Jay J. Pfeiffer, Administrator Florida Education and Training Placement Information Program Office of the Deputy Commissioner

Dear Florida Employer:

You recently received a request for information regarding your firm's opinion of Florida's vocational education system, and the importance you attach to certain elements of employee preparation.

The information that was requested will be compiled with data from other employers for an analysis of employer training and education needs. response will be kept confidential. Data will be used for improved planning and accountability of public funds spent on vocational training programs. Your response is very important as a limited number of Florida employers were selected for participation in this effort.

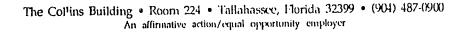
Our records indicate that the data requested of you has not yet been Would you please take a few minutes to review and respond to the received. request?

If you have any questions or require assistance, please call Sam Berto collect in Tallahassee at (904) 488-4987.

If you have already responded to this request, please disregard this remail. Your response and cooperation is greatly appreciated.

Sincerely,

Sam M. Arcangeli Project Director







FLORIDA COUNCIL on VOCATIONAL EDUCATION



Florida Education Center Tallahassee, Florida 32399-0400 904/488-5308

James A. Culligan, Ed.D. Executive Director

Charles "Chic" Perez Fort Lauderdale Chairman

Jean W. Austell Jacksonville

Frances Basi Cocoa

Jeanine Christian Gainesville

Rhonda G. Hogan Boca Raton

William "Ron" Jeffries Bartow

Glynn C. Key, Jr. McDavid

Gerrit J. Knodt, Ph.D. Tampa

Russell L Moncriel Longwood

Eugene A Poole Lowell Chairman Planning Committee

Eileen Schwartz Hollywood

G. Herb Sheheane Taliahassee Vice Chairman

Joan Tiller Orlando Chairman Evaluation Committee Dear Florida Employer:

I am writing to express my appreciation for your participation in the Florida Employer Satisfaction Survey. Your responses to the questions in the survey will be combined with those of other Florida firms for analysis.

The analysis will focus on how well the vocational education system in Florida has responded to the needs of Florida employers. It will be used both by the Florida Chamber of Commerce and the Florida Department of Education to improve program planning. A graph and brief description of employer survey responses are presented for your review on the back of this letter.

Your participation enhances the partnership between the private sector and government sponsored education and training programs. Again, thank you for your assistance.

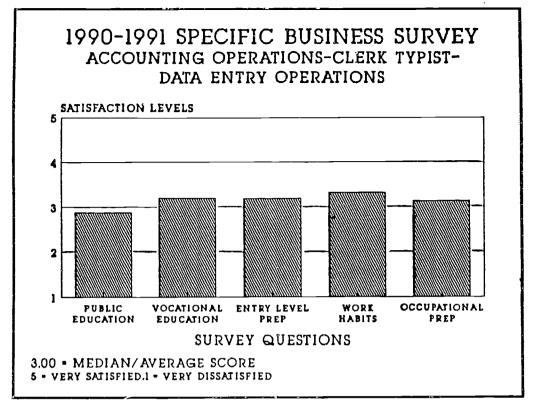
If you have any questions or suggestions, please contact Mr. Jay Pfeiffer (collect) at 904/487-0900.

Sincerely,

Charles R. Perez

Chairman





This graph was developed from employers who, like you, responded to the Florida Employer Opinion Survey. The survey was directed to employers known to have hired a training-related program completer from a specific vocational training program in Florida. The graph represents epinions about Florida's general and vocational education system. It also represents employer opinions about the entry-level preparation, work habits, and overall occupational skill preparation of their employees.

The graph is based on an assigned score of '5' for each very salistied, '4' for each salistied, '3' for each average, '2' for each dissalisted, and '1' for each very dissalisted response. '1 don't know' -type responses were not included in the scoring system. The scores for each response were tallied and the total was divided by the number of responses to get an average or -final score. Therefore, a score of '3' represents the median score or the dividing time between 'salistied' and 'dissalistied'.

The graph shows that employers who responded to the opinion survey were generally not satisfied with the overall system of public education in Florida. Employers were generally satisfied with vocational education. This was reflerated in their opinions about occupational job—specific skill preparation of their employees. The graph also shows a level of satisfaction with the entry—level preparation and work habits of their employees.

If you are interested in further details, please contact the Fiorida Employment and Training Placement Information Program, we will be happy to provide you with a full report from the survey.

FLORIDA EDUCATION & TRAINING PL. EMENT INFORMATION SUITE 224 LEROY COLLINS BLDG.
107 W. GAINES STREET
TALLAHASSEE, FLORIDA



SPECIFIC BUSINESS SURVEY 1990-91

OVERALL EDUCATION OPINIONS

PUBLIC EDUCATION	1.43
VOCATIONAL EDUCATION	1.68
ENTRY LEVEL PREPARATION	1.67
WORK HABITS	1.82

OVERALL OCCUPATIONAL PREPARATION

	OVERALL	ACCNTNG OPERATIONS	CLERK TYPIST	DATA ENTRY OPERATIONS
PERFORM TELEPHONE ACTIVITIES	1.71	1.83	1.40	1.83
PERFORM FILING ACTIVITIES	1.78	1.79	1.67	1.90
PERFORM MAIL HANDLING ACTIVITIES	1.97	2.00	2.00	1.91
PERFORM BUSINESS RECORDS ACTIVITIES	1.61	1.73	1.50	1.50
PERFORM COMMUNICATIONS ACTIVITIES	1.57	1.60	1.36	1.82
PERFORM HUMAN RELATION ACTIVITIES	1.60	1.67	1.50	1.67
PERFORM JOB APPLICATION ACTIVITIES	1.63	1.73	1.50	1.67
PERFORM CONSUMER ECONOMICS ACTIVITIES	1.56	1.56	1.67	1.33
PERFORM KEYBOARDING/TYPING ACTIVITIES	1.74	1.86	1.60	1.81
PERFORM MACHINE TRANSCRIPTION ACTIVITIE	s 1.53	1.71	1.43	1.40
OPERATE DATA ENTRY EQUIPMENT	1.73	1.82	1.46	1.88
DEMONSTRATE KNOWLEDGE OF REPROGRAPHIC				
PROCESS	1.68		1.75	1.57
DEMONSTRATE INFORMATION PRESSING CONCPT	s 1.55		1.33	1.64
IDENTIFY FUNCTIONS OF DATA PROCESSING	1.64	1.70	1.33	1.89
DEVELOP APPROPRIATE GROOMING HABITS	1.79	1.78	1.75	1.81
DEVELOP LEADERSHIP SKILLS	1.35	1.36	1.25	1.46
PERFORM DECISION MAKING ACTIVITIES	1.43	1.58	1.27	1.50
PERFORM MATH COMPUTATIONS	1.49	1.58	1.17	1.73
VERBAL COMMUNICATION SKILLS	1.42	1.36	1.33	1.60
WRITTEN COMMUNICATION SKILLS	1.34	1.50	1.22	1.40
IDENTIFY BUSINESS LAW CONCEPTS		1.43		
PERFORM BOOKKEEPING/ACCOUNTING ACTIVIT	IES	1.70		

AS A RESULT OF PRIOR YEAR FINDINGS THE RESPONSE CATEGORY OF NEITHER SATISFIED/NOR DISSATISFIED WAS SUB-DIVIDED INTO AVERAGE AND I DON'T KNOW AS RESPONSES. FOR COMPARATIVE PURPOSES THE THREE COLUMNS OF SATISFACTION LEVELS CALCULATES SATISFIED AND DISSATISFIED RESPONSES, ONLY. FOR EACH SATISFIED RESPONSE A NUMERICAL ASSIGNMENT OF "2' WAS GIVEN, FOR EACH DISSATISFIED RESPONSE A "1" WAS ASSIGNED. THIS TOTAL WAS THEN DIVIDED BY THE TOTAL NUMBER OF RESPONSES IN EACH QUERY AREA TO OBTAIN A FINAL SCORE. THIS RESULTS IN A MEDIAN SCORE OF 1.5, OR THE DIVIDING POINT BETWEEN SATISFIED AND DISSATISFIED.

5 POINT SCALE

SPECIFIC BUSINESS SURVEY 1990-91

OVERALL EDUCATION OPINIONS

PUBLIC EDUCATION	2.88
VOCATIONAL EDUCATION	3.21
ENTRY LEVEL PREPARATION	3.20
WORK HABITS	3.33

OVERALL OCCUPATIONAL PREPARATION

	OVERALL	ACCNTNG OPERATIONS	CLERK TYPIST	
PERFORM TELEPHONE ACTIVITIES	3.25	3.45	2.96	3.40
PERFORM FILING ACTIVITIES	3.49	3.55	3.22	3.39
PERFORM MAIL HANDLING ACTIVITIES	3.49	3.60	3.36	3.55
PERFORM BUSINESS RECORDS ACTIVITIES	3.06	3.21	3.00	3.00
PERFORM COMMUNICATIONS ACTIVITIES	3.09	3.10	2.86	3.33
PERFORM HUMAN RELATION ACTIVITIES	3.12	3.20	2.96	3.24
PERFORM JOB APPLICATION ACTIVITIES	3.22	3.25	3.07	3.35
PERFORM CONSUMER ECONOMICS ACTIVITIES	3.02	2.94	3.11	3.00
PERFORM KEYBOARDING/TYPING ACTIVITIES	3.33	3.30	3.21	3.45
PERFORM MACHINE TRANSCRIPTION ACTIVITIES	s 3.04	3.20	3.00	2.93
OPERATE DATA ENTRY EQUIPMENT	3.36	3.37	3.08	3.61
DEMONSTRATE KNOWLEDGE OF REPROGRAPHIC				
PROCESS	3.20	3.14	3.25	3.18
DEMONSTRATE INFORMATION PROSSING CONCPT	s 3.07	3.05	2.92	3.24
IDENTIFY FUNCTIONS OF DATA PROCESSING	3.14	2.68	2.85	3.30
DEVELOP APPROPRIATE GROOMING HABITS	3.35	3.30	3.22	3.48
DEVELOP LEADERSHIP SKILLS	2.83	2.68	2.75	3.04
PERFORM DECISION MAKING ACTIVITIES	2.94	3.11	2.73	3.04
PERFORM MATH COMPUTATIONS	3.00	3.05	2.75	3.27
VERBAL COMMUNICATION SKILLS	2.95	2.80	2.83	3.17
WRITTEN COMMUNICATION SKILLS	2.82	2.95	2.62	2.96
IDENTIFY BUSINESS LAW CONCEPTS		2.77		
PERFORM BOOKKEEPING/ACCOUNTING ACTIVITI	ES	3.16		

CALCULATIONS TO OBTAIN A SATISFACTION LEVEL USE A 5-POINT SYSTEM OF "5" FOR EACH VERY SATISFIED, "4" EACH SATISFIED, "3" FOR EACH AVERAGE, "2" FOR EACH DISSATISFIED, AND A "1" FOR EACH VERY DISSATISFIED RESPONSE. THIS TOTAL IS THEN DIVIDED BY THE TOTAL NUMBER OF RESPONSES TO PRODUCE A FINAL SCORE. THIS RESULTS IN A MEDIAN SCORE OF "3.00" WHICH IS THE SEPARATION BETWEEN A SATISFIED AND DISSATISFIED RESPONSE. "I DON'T KNOW"-TYPE RESPONSES WERE NOT USED IN THE CALCULATIONS.



Appendix D

ine	Fubio	yadılıty	SKIIIS	Prome	

C	Instrument	83
Survey	Instrument	-



For each profile element please select one of the following reponse options and record that letter in the space () provided.

(C) CRITICAL

(H) HIGHLY NEEDED

(S) SOMEWHAT NEEDED

(N) NOT NEEDED

--ALSO--

Within each sub-category please try to determine the MOST critical element.

EMPLOYABILITY SKILLS PROFILE

SECTION I

ACADEMIC SKILLS

() 1. Pay attention to the person speaking () 2. Ask questions to clarify understanding () 3. Follow directions given verbally () 4. Answer questions accurately () 5. Explain ideas to others () 6. Understand a foreign language () 7. Recognize and use specific company and business terminology () 8. READ WRITTEN MATERIALS () 8. Recognize and understand signs and symbols in the workplace () 9. Recognize and understand enough words to read simple instructions () 10. Recognize and understand enough words to read complex instructions () 11. Follow writtın instructions required for new tasks () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work	()	A.	UNDERSTAND SPOKEN LANGUAGE AND SPEAK IN THE LANGUAGE IN WHICH BUSINESS IS CONDUCTED
() 2. Ask questions to clarify understanding () 3. Follow directions given verbally () 4. Answer questions accurately () 5. Explain ideas to others () 6. Understand a foreign language () 7. Recognize and use specific company and business terminology () B. READ WRITTEN MATERIALS () 8. Recognize and understand signs and symbols in the workplace () 9. Recognize and understand enough words to read simple instructions () 10. Recognize and understand enough words to read complex instructions () 11. Follow writton instructions required for new tasks () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work (e.g., letters, memos) () 14. Combine and use information from different sources () C. WRITE IN LANGUAGE IN WHICH BUSINESS IS CONDUCTED () 15. Write legibly () 16. Spoll correctly () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 19. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using metric measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages)	,		,	
() 3. Follow directions given verbally () 4. Answer questions accurately () 5. Explain ideas to others () 6. Understand a foreign language () 7. Recognize and use specific company and business terminology () B. READ WRITTEN MATERIALS () 8. Recognize and understand signs and symbols in the workplace () 9. Recognize and understand enough words to read simple instructions () 10. Recognize and understand enough words to read complex instructions () 11. Follow writt, instructions required for new tasks () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work (e.g., letters, memos) () 14. Combine and use information from different sources () C. WRITE IN LANGUAGE IN WHICH BUSINESS IS CONDUCTED () 15. Write legibly () 16. Spall correctly () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 19. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using matric measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages)	•			
() 4. Answer questions accurately () 5. Explain ideas to others () 6. Understand a foreign language () 7. Recognize and use specific company and business terminology () B. READ WRITTEN MATERIALS () 8. Recognize and understand signs and symbols in the workplace () 9. Recognize and understand enough words to read simple instructions () 10. Recognize and understand enough words to read complex instructions () 11. Follow writtn instructions required for new tasks () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work	•	-		
() 5. Explain ideas to others () 6. Understand a foreign language () 7. Recognize and use specific company and business terminology () B. READ WRITTEN MATERIALS () 8. Recognize and understand signs and symbols in the workplace () 9. Recognize and understand enough words to read simple instructions () 10. Recognize and understand enough words to read complex instructions () 11. Follow writtin instructions required for new tasks () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work	(,		
() 6. Understand a foreign language () 7. Recognize and use specific company and business terminology () B. READ WRITTEN MATERIALS () 8. Recognize and understand signs and symbols in the workplace () 9. Recognize and understand enough words to read simple instructions () 10. Recognize and understand enough words to read complex instructions () 11. Follow writt: () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work (e.g., letters, memos) () 14. Combine and use information from different sources () C. WRITE IN LANGUAGE IN WHICH BUSINESS IS CONDUCTED () 15. Write legibly () 16. Spall correctly () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 19. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Heasure using Metric measuring system () 24. Neasure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Perform pumprical results and judge accuracy	()	4.	Answer questions accurately
() B. READ WRITTEN MATERIALS () 8. Recognize and understand signs and symbols in the workplace () 9. Recognize and understand enough words to read simple instructions () 10. Recognize and understand enough words to read complex instructions () 11. Follow writton instructions required for new tasks () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work	()	5.	Explain lideas to others
() B. READ WRITTEN MATERIALS () 8. Recognize and understand signs and symbols in the workplace () 9. Recognize and understand enough words to read simple instructions () 10. Recognize and understand enough words to read complex instructions () 11. Follow writt: () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work	()	6.	Understand a loreign language
() 8. Recognize and understand signs and symbols in the workplace () 9. Recognize and understand enough words to read simple instructions () 10. Recognize and understand enough words to read complex instructions () 11. Follow writton instructions required for new tasks () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work	()	7.	Recognize and use specific company and business commissions
() 8. Recognize and understand signs and symbols in the workplace () 9. Recognize and understand enough words to read simple instructions () 10. Recognize and understand enough words to read complex instructions () 11. Follow writton instructions required for new tasks () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work			_	ADAD INTERNAL MARKETALC
() 9. Recognize and understand enough words to read simple instructions () 10. Recognize and understand enough words to read complex instructions () 11. Follow writton instructions required for new tasks () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work (e.g., letters, memos) () 14. Combine and use information from different sources () C. WRITE IN LANGUAGE IN WHICH BUSINESS IS CONDUCTED () 15. Write legibly () 16. Spall correctly () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 19. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Estimate numerical results and judge accuracy	(_)	ъ.	READ WRITTEN MATERIALS
() 10. Recognize and understand enough words to read complex instructions () 11. Follow writtn instructions required for new tasks () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work (e.g., letters, memos) () 14. Combine and use information from different sources () C. WRITE IN LANGUAGE IN WHICH BUSINESS IS CONDUCTED () 15. Write legibly () 16. Spoil correctly () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 19. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Measure using matric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Estimate numerical results and judge accuracy	()	8.	Recognize and understand signs and symbols in the works to read simple instructions
() 11. Follow writton instructions required for new tasks () 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work	()	9.	Recognize and understand enough words to read sompley instructions
() 12. Understand and evaluate written materials () 13. Know how to read and use different kinds of written materials at work	()	10.	Recognize and understand enough words to read complex instructions
() 13. Know how to read and use different kinds of written materials at work (e.g., letters, memos) () 14. Combine and use information from different sources () C. WRITE IN LANGUAGE IN WHICH BUSINESS IS CONDUCTED () 15. Write legibly () 16. Spoll correctly () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 19. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Heasure using U.S. measuring system () 24. Neasure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Estimate numerical results and judge accuracy	()	11.	Follow writton instructions required for new cases
(e.g., letters, memos) () 14. Combine and use information from different sources () C. WRITE IN LANGUAGE IN WHICH BUSINESS IS CONDUCTED () 15. Write legibly () 16. Spill correctly () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 19. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Estimate numerical results and judge accuracy	()	12.	Understand and evaluate written materials
() C. WRITE IN LANGUAGE IN WHICH BUSINESS IS CONDUCTED () 15. Write legibly () 16. Spill correctly () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 19. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Entimate numerical results and judge accuracy	()	13.	Know how to read and use different kinds of written materials at work
 () C. WRITE IN LANGUAGE IN WHICH BUSINESS IS CONDUCTED () 15. Write legibly () 16. Spill correctly () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 19. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Estimate numerical results and judge accuracy 				(e.g., letters, memos)
() 15. Write legibly () 16. Spill correctly () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 19. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Neasure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Equipment numerical results and judge accuracy	()	14.	Combine and use information from different sources
() 15. Write legibly () 16. Spall correctly () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 19. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Neasure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Entimate numerical results and judge accuracy				TO COMPLETE THE TAXABLE TO COMPLETE
 () 16. Spill correctly () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 19. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Neasure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Entimate numerical results and judge accuracy 	()	C.	WRITE IN LANGUAGE IN WHICH BUSINESS IS CONDUCTED
 () 17. Write sentences and paragraphs using correct punctuation and grammar () 18. Organize and translate thoughts into written communication () 13. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING	()	15.	Write legibly
 () 18. Organize and translate thoughts into written communication () 13. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Estimate numerical results and judge accuracy 	()	16.	Spall correctly
 () 13. Use writing as a normal part of the job (e.g., messages, notes) () D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Estimate numerical results and judge accuracy 	()	17.	Write sentences and paragraphs using correct punctuation and granular
() D. UNDERSTAND AND SOLVE PROBLEMS INVOLVING BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Estimate numerical results and judge accuracy	()	18.	Organize and translate thoughts into written communication
BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Neasure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Entimate numerical results and judge accuracy	()	19.	Use writing as a normal part of the job (e.g., messages, notes)
BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Neasure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Entimate numerical results and judge accuracy				
BASIC ARITHMETIC AND USE RESULTS () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Neasure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Entimate numerical results and judge accuracy				
 () 20. Perform basic calculations (i.e., addition, subtraction, multiplication, division) () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Neasure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Entimate numerical results and judge accuracy 	() D.	UNDERSTAND AND SOLVE PROBLEMS INVOLVING
multiplication, division) () 21. Perform calculations involving fractions, decimals,				BASIC ARITHMETIC AND USE RESULTS
 () 21. Perform calculations involving fractions, decimals, percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Entimate numerical results and judge accuracy 	(٠)	20.	Perform basic calculations (i.e., addition, subtraction,
percentages, and ratios () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Estimate numerical results and judge accuracy				multiplication, division)
 () 22. Read and understand diagrams, charts, graphs, and tables () 23. Measure using U.S. measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Estimate numerical results and judge accuracy 	(ٔ ز	21.	Perform calculations involving fractions, decimals,
() 23. Measure using U.S. measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Estimate numerical results and judge accuracy				percentages, and ratios
() 23. Measure using U.S. measuring system () 24. Measure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Estimate numerical results and judge accuracy	1	٠)	22.	Read and understand diagrams, charts, graphs, and tables
() 24. Neasure using metric measuring system () 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Entimate numerical results and judge accuracy		,	23.	Measure using U.S. measuring system
() 25. Calculate distance, weight, volume, and time () 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Entimate numerical results and judge accuracy		,	24.	. Neasure using metric measuring system
() 26. Understand and apply simple probability and statistics (e.g., calculate averages) () 27. Entimate numerical results and judge accuracy		,	25	calculate distance, weight, volume, and time
averages) /) 27 Entimate numerical results and judge accuracy			26.	Understand and apply simple probability and statistics (e.g., calculate
/) 27 Entimate numerical results and judge accuracy				averages)
() 28. Estimate cost, time, and materials necessary to complete the job		,	27	Estimate numerical results and judge accuracy
		(28	. Estimate cost, time, and materials necessary to complete the job

For each profile element please select one of the following reponse opt as and record that letter in the space () provided.

(C) CRITICAL

(H) HIGHLY NEEDED

(S) SOMEWHAT NEEDED

(N) NOT NEEDED

--ALSO--

Within each sub-category please try to determine the MOST critical element.

SECTION I

ACADEMIC SKILLS (continued)

()	E.	ACCESS AND USE SPECIALIZED KNOWLEGE
•	•		WHEN NECESSARY TO GET THE JOB DONE
()	29.	Know where and how to get specialized information
()	30.	Distinguish between fact and personal opinion
()	31.	Adapt work skills to new technology
ĺ)	32.	Under _cand and use computer/data processing terminology
Ì	Ĺ	33.	Apply basic knowledge of natural sciences (i.e., biology, chemistry,
•			physics)
()	34.	Apply basic knowledge of social sciences, arts and humanities
•			
()	F.	USE TOOLS AND EQUIPMENT NECESSARY TO GET THE JOB DONE
Ì	j	35.	Operate technical equipment, instruments, and tools (e.g., gauges,
			meters, scales)
()	36.	Determine the right tool for the task
()	37.	Follow safety rules for specific equipment
()	38.	Use calculators to solve problems
()	39.	Demonstrate keyboarding skills
ĺ)	40.	Use computer/data processing applications (e.g., word processing,
			business applications)
()	41.	Demonstrate computer programming and networking skills
•			
()	G.	THINK AND ACT LOGICALLY TO SOLVE PROBLEMS
Ċ	j	42.	Recognize and define problems on the job
()	43.	Describe problems in operation of equipment or in processes
()	44.	Analyze problems to determine their source and importance
()	45.	Develop and evaluate new approaches to problem solving
(į	46.	Select the best solutions to a problem
(į	47.	Carry out a decision and evaluate it: effectiveness

For each profile element please select one of the following reponse options and record that letter in the space () provided.

(C) CRITICAL

(H) HIGHLY NEEDED

(S) SOMEWHAT NEEDED

(N) NOT NEEDED

--ALSO--

**Within each sub-category please try to determine the MOST critical element. **

II

SECTION

SKILLS MANAGEMENT PERSONAL () H. IDENTIFY PERSONAL JOB-RELATED INTERESTS, STRENGTHS, OPTIONS, AND OPPORTUNITIES () 48. Apply knowledge of one's personality traits (e.g., interests, values, strengths, and weaknesses) when setting personal goals () 49. Follow aplan to achieve career goals () 50. Exhibit self-esteem and self-confidence () 51. Exhibit skills that apply to more than one job () 52. Understand employees' legal rights and responsibilities () 53. Pursue personal goals that support the organization's goals () I. DEMONSTRATE PERSONAL VALUES AND ETHICS IN THE WORKPLACE (E.G., HONESTY, FAIRNESS, AND RESPECT FOR OTHERS) () 54. Show respect for others () 55. Show pride in one's work () 56. Show enthusiasm for the work to be done () 57. Demonstrate honesty and integrity () J. EXERCISE A SENSE OF RESPONSIBILITY () 58. Meet requirements for punctuality and attendance () 59. Plan and organize to complete tasks () 60. Show initiative; be a "self-starter" () 61. Meet or exceed requirements for work quality () 62. Complete tasks in the face of job pressures or stresses () 63. Follow safety rules and practices (e.g., hazardous materials) () 64. Demonstrate self-control () 65. Demonstrate appropriate grooming and dress, and practice good personal hygiene () 66. Be free from substance abuse (e.g., dependence on alcohol or drugs) () 67. Work productively with minimum supervision () K. LEARN NEW SKILLS AND WAYS TO DO THINGS () 68. Know when it is necessary to upgrade one's skills and knowledge

() 69. Demonstrate a positive attitude toward learning and growth

() 70. Be adaptable, flexible, and open to change () 71. Participate in education and training () 72. Use creativity and imagination on the job () 73. Generate new ideas for getting the job done For each profile element please select one of the following reponse options and record that letter in the space () provided.

(C) CRITICAL

(H) HIGHLY NEEDED

(S) SOMEWHAT NEEDED

(N) NOT NEEDED

--ALSO--

Within each sub-categoryplease try to determine the MOST criticablement.

SECTION III:

TEAMWORK

() 85. Accept constructive criticism of performance and ideas

SKILLS

()	L.	IDENTIFY WITH THE GOALS, NORMS, VALUES, CUSTOMS AND CULTURE OF THE GROUP
()	74.	Accept the organization's mission and goals
()	75.	Represent organization in a positive manner
()	76.	Follow organizational rules, procedures, and policies
()	77.	Show interest in organization's future
()	78.	Use a team approach to identify problems and devise solutions
()	M.	FUNCTION IN CHANGING WORK SETTINGS AND IN CHANGING WORK TEAMS
,	,	70	AND IN CHANGING WORK TEAMS Communicate effectively with all members of the work team
			Compromise to achieve work team results
•	-		Show sensitivety to the thoughts and opinions of others in the work team
	•		Accept decisions made by the work team
•	•		Determine when to be a leader or a follower
•	•		Cooperate with others to get the job done

() 86. Show sensitivity to the needs of women and ethnic of racial minorities





State of Florida
Department of Education
Tallahassee, Florida
Betty Castor, Commissioner
Affirmative action/equal opportunity employer

